

# MANUFACTURERS' RECORD

A WEEKLY SOUTHERN INDUSTRIAL  
RAILROAD AND FINANCIAL NEWSPAPER.

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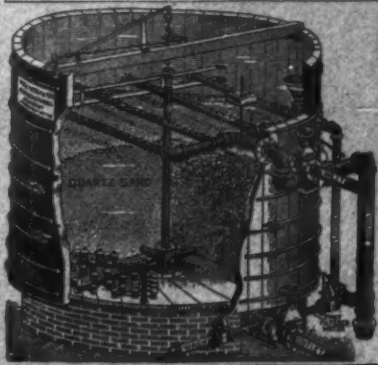
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VOL. XXXVI  
No. 6.

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Baltimore, September 1, 1899.





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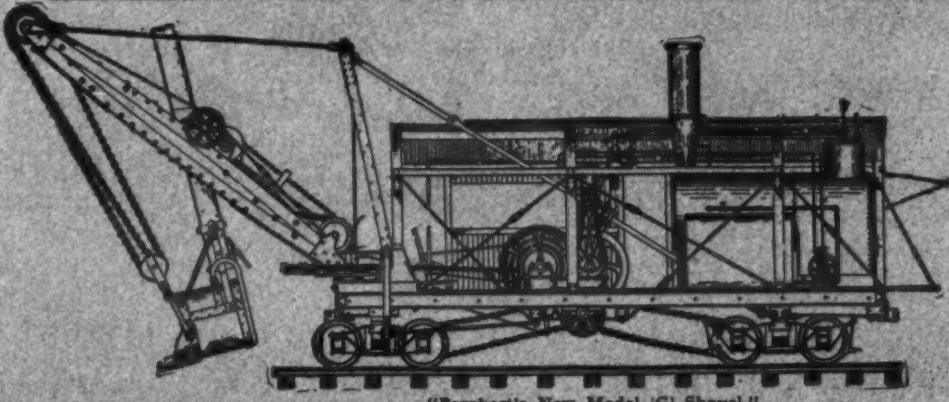
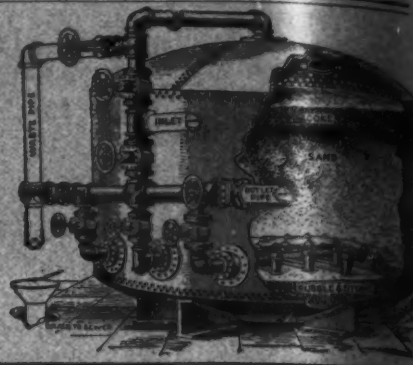
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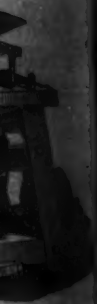
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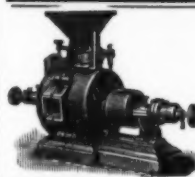


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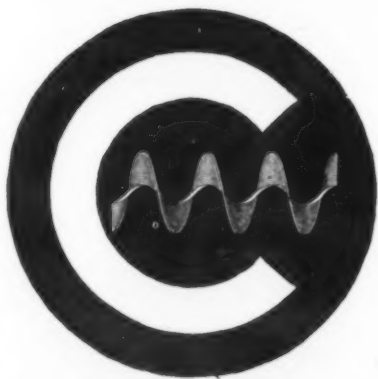
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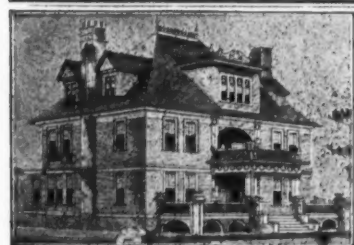
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Boomer & Boschert Press Co., Syracuse, N.Y.  
Valk & Murdoch Iron Wks., Charleston, S.C.  
**Presses.** (Stamping.)  
Niagara Mch. & Tool Wks., Buffalo, N. Y.  
W. Bliss Co., 137 Plymouth street, Brooklyn, N. Y.  
**Pulleys.** (Wood Split.)  
Bradford Belting Co., Cincinnati, O.  
Saginaw Manufacturing Co., Saginaw, Mich.  
The Keasey Pulley Co., Toledo, O.  
**Pulleys, Shafting and Hangers.**  
Norris, Burnham & Co., Inc., Glen Rock, Pa.  
Robins Conveying Belt Co., New York, N. Y.  
T. E. Woods' Sons, Chambersburg, Pa.  
The Finished Steel Co., Youngstown, O.  
P. Frybill, New York, N. Y.  
Jones & Laughlins, Ltd., Pittsburgh, Pa.  
Valley Iron Works, Williamsport, Pa.  
J. A. Fay & Co., Cincinnati, O.  
The Egan Co., Cincinnati, O.  
Fairmount Machine Co., Philadelphia, Pa.  
The Jeffrey Mfg. Co., Columbus, O.  
Lombard Iron Wks. & Sup. Co., Augusta, Ga.  
Golden Fdy. & Mch. Co., Columbus, Ga.  
Norden & Marmon Co., Indianapolis, Ind.  
Norden Mfg. Co., Montpelier, Vt.  
Lane Co., Chambersburg, Pa.  
H. W. Caldwell & Son Co., Chicago, Ill.  
**Pumps.** (Pneumatic.)  
Bacon Air Lift Co., New York, N. Y.  
Merrill Pneumatic Pump Co., New York, N. Y.  
**Pumps.** (Power Boiler-Feed.)  
A. S. Cameron St. Pump Wks., New York, N. Y.  
John H. McGowan Co., Cincinnati, O.  
**Pumps.** (Centrifugal.)  
Kingsford Fdy. & Mch. Wks., Oswego, N. Y.  
Southwark Fdy. & Mch. Co., Philadelphia, Pa.  
**Pumps.** (Rotary.)  
Davis Johnson Co., Chicago, Ill.  
**Pumps.** (Steam.)  
J. B. Poore, Scranton, Pa.  
Jeanesville Iron Works Co., Jeanesville, Pa.  
F. C. Austin Mfg. Co., New York, N. Y.  
Watson-Stillman Co., New York, N. Y.  
Sydney Pump & Well Co., Richmond, Va.  
Hooker Steam Pump Co., St. Louis, Mo.  
Gardner Governor Co., Quincy, Ill.  
Mason Regulator Co., Boston, Mass.  
Cameron & Barkley Co., Charleston, S. C.  
Stillwell-Bierce & Smith-Valle Co., Dayton, O.  
John H. McGowan & Co., Cincinnati, O.  
Henry R. Worthington, New York, N. Y.  
Pulsoeter St. Pump Co., New York, N. Y.  
Dean Bros. St. Pump Wks., Indianapolis, Ind.  
A. S. Cameron St. Pump Wks., New York, N. Y.  
**Pumping Machinery.**  
The Stewart Heater Co., Buffalo, N. Y.  
Jeanesville Iron Works Co., Jeanesville, Pa.  
Fraser & Chalmers, Chicago, Ill.  
Davis Johnson Co., Chicago, Ill.  
Henry R. Worthington, New York, N. Y.  
Dean Bros., Indianapolis, Ind.  
Stillwell-Bierce & Smith-Valle Co., Dayton, O.  
The Cook Well Co., St. Louis, Mo.  
Bacon Air Lift Co., New York, N. Y.  
**Pump Governor.**  
Mason Regulator Co., Boston, Mass.  
E. Keeler Co., Williamsport, Pa.  
**Punching and Shearing Machinery.**  
Roversford Fdy. & Mch. Co., Roversford, Pa.  
E. W. Bliss Co., 137 Plymouth street, Brooklyn, N. Y.  
Bertsch & Co., Cambridge City, Ind.  
J. M. Robinson & Co., Cincinnati, O.  
**Quarry and Stonecutting Mch.**  
Dobbie Fdy. & Mch. Co., Niagara Falls, N. Y.  
Sullivan Machinery Co., Chicago, Ill.  
Rand Drill Co., New York, N. Y.  
Ingersoll-Sergeant Drill Co., New York, N. Y.  
Jeffrey Mfg. Co., Columbus, O.  
**Railroad Equipment and Supplies.**  
(New and Second-hand.)  
Merwin McKaig, Cumberland, Md.  
Hyde Bros. & Co., Pittsburg, Pa.  
Fitzbert & Peckham, Chicago, Ill.  
Rush-Hugh & Co., Chicago, Ill.  
Isaac Joseph Iron Co., Cincinnati, O.  
Thornton N. Motley Co., New York, N. Y.  
Males & Co., Cincinnati, O.  
M. Mithskun & Co., Detroit, Mich.  
R. L. Ginsburg & Sons, Detroit, Mich.  
Dallett & Co., Philadelphia, Pa.  
Lumbermen Sup. & Equip. Co., Savannah, Ga.  
The Smith & Kilby Co., Anniston, Ala.  
Thos. P. Conard, Philadelphia, Pa.  
Benj. Watson, New York, N. Y.  
The Steel Rail Supply Co., New York, N. Y.  
Birmingham Rail & Locomotive Co., Birmingham, Ala.  
New York Equipment Co., New York, N. Y.  
Poulter & Co., Philadelphia, Pa.  
The Bailey-Libby Co., Charleston, S. C.  
Cameron & Barkley Co., Charleston, S. C.  
L. K. Hirsch, Chicago, Ill.  
Robinson & Orr, Pittsburg, Pa.  
Weir Frog Co., Cincinnati, O.  
H. K. Porter Co., Pittsburg, Pa.  
Baldwin Locomotive Wks., Philadelphia, Pa.  
**Rails.** (Steel.)  
Males & Co., Cincinnati, O.  
The Steel Rail Supply Co., New York, N. Y.  
Aetna Stand. Iron & Steel Co., Bridgeport, O.  
**Reamers.**  
Morse Twist Drill & Mch. Co., New Bedford, Mass.  
**Refrigerating Plants.** [See Ice-making Machinery.]  
**Regulators.** (Water & Steam Pressure.)  
Crosby St. Gage & Valve Co., Boston, Mass.  
H. Mueller Mfg. Co., Decatur, Ill.  
Mason Regulator Co., Boston, Mass.  
Henry R. Worthington, New York, N. Y.  
**Regulators.** (Damper.)  
Mason Regulator Co., Boston, Mass.  
**Riding Gallery.** (Steam.)  
Armstrong-Herschell Co., N. Tonawanda, N. Y.  
**Rivets.** (Lead.)  
Edwin B. Stimpson & Son, New York, N. Y.  
Salem Nail Co., New York, N. Y.  
**Riveter.**  
Sheehan Mfg. Co., Salem, O.  
The Dexter Manufacturing Co., Salem, O.  
Capital City Machine Works, Columbus, O.  
**Riveter.** (Compressed Air.)  
Pedrick & Ayer Co., Philadelphia, Pa.

**Road Machinery.**  
Kans. City Wheel Scraper Co., Kans. City.  
Austin & Western Co., Ltd., Chicago, Ill.  
The Aultman Co., Canton, O.  
The O. S. Kelly Co., Springfield, O.  
Russell & Co., Massillon, O.  
Kilbourne & Jacobs Mfg. Co., Columbus, O.  
**Roller Bearings.**  
Hyatt Roller Bearing Co., Harrison, N. J.  
**Roofing.** (Felt, Tar, Asphalt, Paper, etc.)  
H. W. Johns Mfg. Co., New York, N. Y.  
Cambria Steel Co., Johnstown, Pa.  
Globe Paint & Roofing Co., Cincinnati, O.  
Atlantic Alcatraz Asphalt Co., New York.  
Warren Chemical & Mfg. Co., New York.  
National Roofing & Sup. Co., Louisville, Ky.  
The Armitage Mfg. Co., Richmond, Va.  
Standard Paint Co., New York, N. Y.  
C. S. Garrett & Son, Philadelphia, Pa.  
**Roofing and Siding.** (Metal.)  
Merchant & Co., Philadelphia, Pa.  
Cortright Metal Roofing Co., Phila., Pa.  
**Roofing.** (Metal Shingles.)  
Merchant & Co., Inc., Philadelphia, Pa.  
Montross Metal Shingle Co., Camden, N. J.  
Cortright Metal Roofing Co., Phila., Pa.  
**Roofing.** (Slate.)  
Bangor Excelsior Slate Co., Easton, Pa.  
David McKenna, Slattington, Pa.  
John Galt & Sons, New York, N. Y.  
Slattington-Bangor Slate Syn., Slattington, Pa.  
**Roofers' and Tinner's Supplies.**  
Niagara Mch. & Tool Wks., Buffalo, N. Y.  
Merchant & Co., Inc., Philadelphia, Pa.  
J. M. Robinson & Co., Cincinnati, O.  
**Rope.** (Transmission.)  
T. B. Woods' Sons, Chambersburg, Pa.  
C. W. Hunt Co., West New Brighton, N. Y.  
Link-Belt Engineering Co., Philadelphia, Pa.  
The American Mfg. Co., New York, N. Y.  
**Rubber Goods.**  
Boston Belting Co., Boston, Mass.  
N. J. Car Spring & Rub. Co., Jersey City, N. J.  
Eureka Fire Hose Co., New York, N. Y.  
**Sacks.** (Fertilizer, etc.)  
John T. Bailey & Co., Philadelphia, Pa.  
**Safes.** (Fire and Burglar-Proof.)  
York Safe & Lock Co., York, Pa.  
**Safety Water Columns.**  
Standard Gauge Mfg. Co., Cleveland, O.  
Reliance Gauge Column Co., Cleveland, O.  
Crosby St. Gage & Valve Co., Boston, Mass.  
N. O. Nelson Mfg. Co., St. Louis, Mo.  
**Saws.** [See Woodworking Machinery.]  
Southern Saw Works, Atlanta, Ga.  
Hammacher, Schlemmer & Co., New York.  
Huther Bros., Rochester, N. Y.  
E. C. Atkins & Co., Indianapolis, Ind.  
W. F. & John Barnes Co., Rockford, Ill.  
**Saw-Mill Machinery.**  
W. T. Adams Machine Co., Corinth, Miss.  
The Florence Machine Works, Florence, Ala.  
Soule Steam Feed Works, Meridian, Miss.  
Sydney Pump & Well Co., Richmond, Va.  
N. O. Nelson Mfg. Co., St. Louis, Mo.  
H. W. Beach, Montrose, Pa.  
The E. D. Albro Co., Cincinnati, O.  
A. B. Farquhar Co., Ltd., York, Pa.  
Hench & Dromgold, York, Pa.  
Union Iron Works Co., Selma, Ala.  
The Bailey-Libby Co., Charleston, S. C.  
Lane Mfg. Co., Montpelier, Vt.  
J. A. Fay & Co., Cincinnati, O.  
The Egan Co., Cincinnati, O.  
Mecklenburg Iron Works, Charlotte, N. C.  
Cameron & Barkley Co., Charleston, S. C.  
Frick Co., Waynesboro, Pa.  
E. & B. Holmes Mch. Co., Buffalo, N. Y.  
**Saw Sharpeners and Files.**  
Carver Cotton Gin Co., E. Bridgewater, Mass.  
Covel Manufacturing Co., Chicago, Ill.  
**Scales.** (Railroad, etc.)  
Standard Scale & Fixture Co., St. Louis, Mo.  
Stand. Scale & Sup. Co., Ltd., Pittsburg, Pa.  
**Schools and Colleges.**  
American School of Correspondence, Boston.  
International Correspondence Schools, Scranton, Pa.  
**Screeners.** (Ore and Coke.)  
Charles Mundt & Sons, New York, N. Y.  
The Aultman Co., Canton, O.  
The Jeffrey Mfg. Co., Columbus, O.  
The Ludlow-Saylor Wire Co., St. Louis, Mo.  
McLanahan & Stone, Hollidaysburg, Pa.  
Hendrick Mfg. Co., Ltd., Carbondale, Pa.  
Harrington & King Perf. Co., Chicago, Ill.  
**Screen Plates.**  
Charles Mundt & Sons, New York, N. Y.  
The Ludlow-Saylor Wire Co., St. Louis, Mo.  
Hendrick Mfg. Co., Ltd., Carbondale, Pa.  
Harrington & King Perf. Co., Chicago, Ill.  
**Screws.** (Machine and Wood.)  
Franklin S. Miles, Philadelphia, Pa.  
Philadelphia Mch. Screw Wks., Phila., Pa.  
**Screw Nuts.** [See Woodworking Mch.]  
H. W. Beach, Montrose, Pa.  
W. F. & John Barnes Co., Rockford, Ill.  
J. A. Fay & Co., Cincinnati, O.  
The Egan Co., Cincinnati, O.  
**Separator.** (Steam and Grease.)  
Harrison Safety Boiler Works, Phila., Pa.  
**Sheet-Metal-Working Machinery.**  
Niagara Mch. & Tool Wks., Buffalo, N. Y.  
Roversford Fdy. & Mch. Co., Roversford, Pa.  
The Jeffrey Mfg. Co., Columbus, O.  
E. W. Bliss Co., 137 Plymouth street, Brooklyn, N. Y.  
Bertsch & Co., Cambridge City, Ind.  
Chas. H. Besly & Co., Chicago, Ill.  
J. M. Robinson & Co., Cincinnati, O.  
**Sheet Steel and Iron.**  
Apollo Iron & Steel Co., Pittsburg, Pa.  
W. Dewees Wood Co., McKeesport, Pa.  
Alan Wood Co., Philadelphia, Pa.  
**Shingle, Lath and Stave Machinery.**  
[See Woodworking Machinery.]  
Baxter D. Whitney, Winchendon, Mass.  
Lane Mfg. Co., Montpelier, Vt.  
E. & B. Holmes Mch. Co., Buffalo, N. Y.  
Trevor Mfg. Co., Lockport, N. Y.  
**Ship Builders.** (Iron and Steel.)  
Newport News Shipbuilding & Dry Dock Co., Newport News, Va.  
**Skylights and Ventilators.**  
Davis Glass Co., Pittsburg, Pa.  
E. Van Noorden Co., Boston, Mass.  
Merchant & Co., Inc., Philadelphia, Pa.  
**Slate.** (Roofing and Blackboard.)  
Bangor Excelsior Slate Co., Easton, Pa.  
David McKenna, Slattington, Pa.  
John Galt & Sons, New York, N. Y.  
Slattington-Bangor Slate Syn., Slattington, Pa.

**Slaters' Tools.**  
Salem Nail Co., New York, N. Y.  
**Smelting Furnaces.**  
Fraser & Chalmers, Chicago, Ill.  
**Soapmakers' and Butchers' Mch.**  
H. Wm. Dopp & Son, Buffalo, N. Y.  
**Solder.**  
A. K. Robins & Co., Baltimore, Md.  
Theo. Hertz & Son, St. Louis, Mo.  
**Soldering Crystals.**  
Carr Manufacturing Co., Boston, Mass.  
**Southern Investments.**  
Amer. Promoting & Trust Co., Boston, Mass.  
Mottu, de Witt & Co., Norfolk, Va.  
John L. Williams & Sons, Richmond, Va.  
F. M. Stafford & Co., Chattanooga, Tenn.  
**Speaking Tubes.**  
Chas. H. Besly & Co., Chicago, Ill.  
**Spelter.**  
Theo. Hertz & Son, St. Louis, Mo.  
**Springs.** (Bicycle Saddle.)  
Morgan Spring Co., Worcester, Mass.  
**Springs.** (Spiral.)  
Cary Spring Works, New York, N. Y.  
Lord Bros. Mfg. Co., Tilton, N. H.  
The Ludlow-Saylor Wire Co., St. Louis, Mo.  
Morgan Spring Co., Worcester, Mass.  
Chas. H. Besly & Co., Chicago, Ill.  
N. J. Car Spring & Rub. Co., Jersey City, N. J.  
**Springs.** (Railway and Machinery.)  
Boston Belting Co., Boston, Mass.  
N. J. Car Spring & Rub. Co., Jersey City, N. J.  
Cary Spring Works, New York, N. Y.  
Lord Bros. Mfg. Co., Tilton, N. H.  
Morgan Spring Co., Worcester, Mass.  
**Sprinklers.** (Automatic.) [See Fire Extinguishers.]  
**Stamp Mills.**  
Mecklenburg Iron Works, Charlotte, N. C.  
Merchant & Co., Inc., Philadelphia, Pa.  
Fraser & Chalmers, Chicago, Ill.  
**Standpipes.**  
Hartley Boiler Works, Montgomery, Ala.  
Means & Fulton Iron Wks., Birmingham, Ala.  
York Mfg. Co., York, Pa.  
Lombard Iron Wks. & Sup. Co., Augusta, Ga.  
Birmingham Boiler Works, Birmingham, Ala.  
**Steam Gages.**  
The Ashcroft Mfg. Co., New York, N. Y.  
Crosby St. Gage & Valve Co., Boston, Mass.  
**Steam Heating.**  
Warren Webster Co., Camden, N. J.  
The Peck-Hammond Co., Cincinnati, O.  
**Steam Shovels.** [See Dredges and Excavators.]  
**Steam Traps.**  
W. S. Haines Co., Philadelphia, Pa.  
Thorpe, Platt & Co., New York, N. Y.  
B. F. Sturtevant Co., Boston, Mass.  
Mason Regulator Co., Boston, Mass.  
**Steamship Lines.**  
Cleveland & Buffalo Trans. Co., Cleveland, O.  
Baltimore, Chesapeake & Atlantic Railway Co., Baltimore, Md.  
Richmond & York River Line, Balto., Md.  
Merchants & Miners' Trans. Co., Balto., Md.  
Bay Line Steamers, Baltimore, Md.  
Atlantic Transport Co., Baltimore, Md.  
**Steel.** (Manufacturers of.)  
Alan Wood Co., Philadelphia, Pa.  
W. Dewees Wood Co., McKeesport, Pa.  
Aetna Stand. Iron & Steel Co., Bridgeport, O.  
Apollo Iron & Steel Co., Pittsburg, Pa.  
Chester Steel Castings Co., Phila., Pa.  
**Steel Rods.** (Polished.)  
The Finished Steel Co., Youngstown, O.  
**Stokers.** (Mechanical.)  
American Stoker Co., New York, N. Y.  
Westinghouse Machine Co., Pittsburg, Pa.  
Wilkinson Mfg. Co., Philadelphia, Pa.  
**Structural Steel and Iron.**  
Champion Bridge Co., Wilmington, O.  
G. W. Drury, Agent, York, Pa.  
**Studs, Nuts.**  
Phila. Machine Screw Wks., Philadelphia, Pa.  
Franklin S. Miles, Philadelphia, Pa.  
**Sugar-Mill Machinery.**  
Henry G. Morris, Philadelphia, Pa.  
**Switchboards, Switches, etc.**  
The North Electric Co., Cleveland, O.  
Western Electrical Supply Co., St. Louis, Mo.  
A. N. Palmer & Co., Baltimore, Md.  
Westinghouse Elec. & Mfg. Co., Pittsb'g, Pa.  
**Tacks.** (Galvanized and Zinc.)  
Salem Nail Co., New York, N. Y.  
**Tanks.** (Iron and Steel.)  
Lee-Odum Boiler Co., Memphis, Tenn.  
Sydney Pump & Well Co., Richmond, Va.  
Hartley Boiler Works, Montgomery, Ala.  
The Aultman Co., Canton, O.  
Means & Fulton Iron Wks., Birmingham, Ala.  
York Mfg. Co., York, Pa.  
Lombard Iron Wks. & Sup. Co., Augusta, Ga.  
Birmingham Boiler Wks., Birmingham, Ala.  
Valk & Murdoch Iron Wks., Charleston, S. C.  
**Tanks.** (Wood.)  
Sydney Pump & Well Co., Richmond, Va.  
Cypress Lumber Co., Apalachicola, Fla.  
G. M. Davis & Son, Palatka, Fla.  
H. F. Lewis & Co., Ltd., New Orleans, La.  
**Telephones.**  
The North Electric Co., Cleveland, O.  
Western Electrical Supply Co., St. Louis, Mo.  
A. N. Palmer & Co., Baltimore, Md.  
The Rawson Electric Co., Elyria, O.  
**Terne Plate.**  
Merchant & Co., Inc., Philadelphia, Pa.  
Aetna Stand. Iron & Steel Co., Bridgeport, O.  
C. M. Gilbert & Co., Savannah, Ga.  
**Terra Cotta.**  
Pomona Terra Cotta Co., Pomona, N. C.  
V. H. Krieger, Atlanta, Ga.  
**Textile Machinery.** [See Cotton-Mill Machinery.]  
A. T. Atherton Mch. Co., Pawtucket, R. I.  
Atlas Manufacturing Co., Newark, N. J.  
Fairmount Machine Co., Philadelphia, Pa.  
J. A. Gowdy & Son, Providence, R. I.  
Crompton & Knowles Loom Works, Worcester, Mass.  
Lowell Machine Shop, Lowell, Mass.  
American Supply Co., Providence, R. I.  
Draper Co., Hopedale, Mass.  
Whitinsville Spln. Ring Co., Whitinsville, Mass.  
Mason Machine Works, Taunton, Mass.  
Kilburn, Lincoln & Co., Fall River, Mass.  
**Timplate.**  
Merchant & Co., Inc., Philadelphia, Pa.  
Aetna Stand. Iron & Steel Co., Bridgeport, O.  
**Tobacco Machinery.**  
Cardwell Machine Co., Richmond, Va.  
Buckeye Iron and Brass Works, Dayton, O.  
**Tarred Goods.**  
C. S. Garrett & Son, Philadelphia, Pa.

**Tools.** (Machinists' and Mechanics.)  
Champion Blower & Forge Co., Lancaster, Pa.  
Standard Tool Co., Cleveland, O.  
J. J. McCabe, New York, N. Y.  
Hammacher, Schlemmer & Co., New York.  
Fifield Tool Co., Lowell, Mass.  
Chas. H. Besly & Co., Chicago, Ill.  
Henry B. Pancoast & Co., Philadelphia, Pa.  
Morse Twist Drill & Machine Co., New Bedford, Mass.  
**Tools.** (Bicycle and Electrical.)  
E. W. Bliss Co., 137 Plymouth street, Brooklyn, N. Y.  
**Tools.** (Tinner's.)  
Niagara Mch. & Tool Wks., Buffalo, N. Y.  
**Torch.** (Contractors.)  
Wells Light Mfg. Co., New York, N. Y.  
**Tote Boxes.**  
W. J. Clark Co., Salem, O.  
**Tramway.** (Overhead.)  
Chisholm & Moore Mfg. Co., Cleveland, O.  
J. G. Spedel, Reading, Pa.  
Cohoes Iron Fdry. & Mch. Co., Cohoes, N. Y.  
**Trucks.** [See Wheelbarrows.]  
**Tube Expanders.**  
Joseph F. McCoy Co., New York, N. Y.  
**Tube Cleaners.**  
Union Boiler Tube Cleaner Co., Pittsburg, Pa.  
**Tubing.**  
The Ludlow-Saylor Wire Co., St. Louis, Mo.  
Chas. H. Besly & Co., Chicago, Ill.  
**Turbines.** [See Water Wheels.]  
**Valves.**  
Consolidated Valve Co., New York, N. Y.  
Kennedy Valve Mfg. Co., New York, N. Y.  
Watson-Stillman Co., New York, N. Y.  
Gardner Governor Co., Quincy, Ill.  
The Fred W. Wolf Co., Chicago, Ill.  
Boston Belting Co., Boston, Mass.  
Crosby St. Gage & Valve Co., Boston, Mass.  
Mason Regulator Co., Boston, Mass.  
N. J. Car Spring & Rub. Co., Jersey City, N. J.  
R. D. Wood & Co., Philadelphia, Pa.  
Jenkins Bros., New York, N. Y.  
Ludlow Valve Mfg. Co., Troy, N. Y.  
**Valves.** (Safe Deposit, etc.)  
York Safe & Lock Co., York, Pa.  
**Veneer Machines.**  
The E. D. Albro Co., Cincinnati, O.  
**Vices.**  
Hollands Manufacturing Co., Erie, Pa.  
**Wagon Builders' Mch. & Supplies.**  
Cordesman, Meyer & Co., Cincinnati, O.  
H. W. Beach, Montrose, Pa.  
J. A. Fay & Co., Cincinnati, O.  
The Egan Co., Cincinnati, O.  
**Washers.** (Ore and Phosphate.)  
The Aultman Co., Canton, O.  
McLanahan & Stone, Hollidaysburg, Pa.  
Valk & Murdoch Iron Wks., Charleston, S. C.  
Cameron & Barkley Co., Charleston, S. C.  
The Bailey-Libby Co., Charleston, S. C.  
**Water-Softening Plants.**  
The Wefugo Co., Cincinnati, O.  
**Water-Wheels and Turbines.**  
Norris, Burnham & Co., Inc., Glen Rock, Pa.  
York Mfg. Co., York, Pa.  
John W. Taylor, Atlanta, Ga.  
Christiana Machine Co., Christiana, Pa.  
American Impulse Wheel Co., New York, N. Y.  
James Leffel & Co., Springfield, O.  
Lane Mfg. Co., Montpelier, Vt.  
Wolf Co., Chambersburg, Pa.  
Stillwell-Bierce & Smith-Valle Co., Dayton, O.  
S. Morgan Smith Co., York, Pa.  
**Water Meters.**  
Pittsburg Meter Co., Pittsburg, Pa.  
**Water-Works and Sewerage.**  
N. O. Nelson Mfg. Co., St. Louis, Mo.  
H. Mueller Mfg. Co., Decatur, Ill.  
R. D. Wood & Co., Philadelphia, Pa.  
**Weighing Machines.**  
Jos. F. McCoy Co., New York, N. Y.  
**Well Drillers.** [See Well Tools and Supplies.]  
**Well Tools and Supplies.** (Artesian.)  
Phillips & Worthington, New York, N. Y.  
Sydney Pump & Well Co., Richmond, Va.  
The Cook Well Co., St. Louis, Mo.  
Bacon Air Lift Co., New York, N. Y.  
Williams Bros., Ithaca, N. Y.  
**Wheelbarrows and Trucks.**  
Standard Scale & Fixture Co., St. Louis, Mo.  
Jackson Manufacturing Co., Harrisburg, Pa.  
Kilbourne & Jacobs Mfg. Co., Columbus, O.  
**Whistles.** (Chime, Sirens, etc.)  
Crosby St. Gage & Valve Co., Boston, Mass.  
**White Lead.**  
Samuel H. French & Co., Philadelphia, Pa.  
**Windlasses.**  
J. W. Moyer, Philadelphia, Pa.  
American Ship Wind. Co., Providence, R. I.  
**Wire Goods.**  
The Fred J. Meyers Mfg. Co., Hamilton, O.  
Dow Wire Works Co., Louisville, Ky.  
Dufur & Co., Baltimore, Md.  
The Ludlow-Saylor Wire Co., St. Louis, Mo.  
**Wire-Rope Thimbles.**  
Jackson Mfg. Co., Harrisburg, Pa.  
**Wire, Wire Rope, Barbed Wire, etc.**  
American Steel & Wire Co., Pittsburg, Pa.  
The Aultman Co., Canton, O.  
The Jeffrey Mfg. Co., Columbus, O.  
Contractors' Plant Mfg. Co., Buffalo, N. Y.  
Chas. H. Besly & Co., Chicago, Ill.  
Trenton Iron Co., Trenton, N. J.  
The Ludlow-Saylor Wire Co., St. Louis, Mo.  
**Woodsplitting Machines.**  
Trevor Mfg. Co., Lockport, N. Y.  
**Woodworking Machinery.**  
Southern Saw Works, Atlanta, Ga.  
Samuel J. Shimer & Sons, Milton, Pa.  
P. Frybill, New York, N. Y.  
Greaves, Klusman & Co., Cincinnati, O.  
Huther Bros., Rochester, N. Y.  
American Woodworking Mch. Co., New York.  
H. B. Smith Machine Co., Smithville, N. J.  
Chattanooga Mch. Co., Chattanooga, Tenn.  
Baxter D. Whitney, Winchendon, Mass.  
Cordesman, Meyer & Co., Cincinnati, O.  
H. W. Beach, Montrose, Pa.  
Lane Mfg. Co., Montpelier, Vt.  
E. & B. Holmes Mch. Co., Buffalo, N. Y.  
Ober Mfg. Co., Chagrin Falls, O.  
J. A. Fay & Co., Cincinnati, O.  
The Egan Co., Cincinnati, O.  
Trevor Mfg. Co., Lockport, N. Y.  
**Zinc.**  
Merchant & Co., Inc., Philadelphia, Pa.  
New Jersey Zinc Co., New York, N. Y.



# AULTMAN

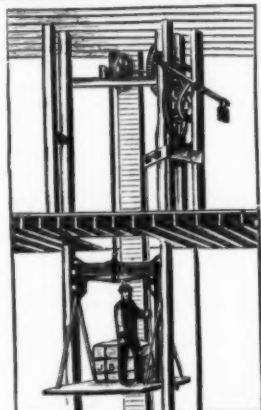


THE surest profits are those saved by decreasing the cost of production. Our special labor-saving appliances will cut down the cost of handling material. You can do the rest.

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THE AULTMAN COMPANY,  
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Pat. April 18, 1871. Reissued July 25, 1875.  
OVER 10,000 IN USE.



Adapted for Warehouses, Stores, Factories, Hotels, Public Institutions and every place where merchandise, &c., is transferred from one story to another.

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Successors to JAMES BATES,  
Corner Pratt and President Streets,  
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FOR  
Hand, Belt and  
Electric Power.

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Machine Screws  
Made to Order and Carried in Stock.  
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Spring Makers. Solicit our prices.

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Especially Adapted for the South.  
Full instructions furnished for putting up and operating your own plant, including processing of all of the various canned goods. Prices from \$75 upwards. Also Cans, Labels, Cases and Solder.

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Narrow Gauge Cars for Elevated Coal Trestles, Industrial Railways, and for Mining purposes. Iron Hoisting Blocks for Manila and Wire Rope, Steel Tray Wheelbarrows, etc.  
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CHAIN BLOCKS.

We are making these  
Blocks second to none,  
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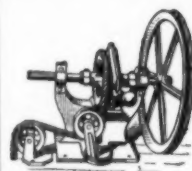
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WE sell our Co-  
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by having your Old Lead rerolled for acid cham-  
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in which the damage has been confined to  
limited area, and minimum amount, show  
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It's easy to haul a big load up a big hill if you grease the wagon wheels with

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COTTON TIE  
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**\$75,** delivered at your station freight prepaid.

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RIVETING  
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The perfection of Leather Riveters. The product of an expert mechanic. Every part is just as strong as it ought to be, and it has more power to spread the rivet than any other machine of the kind made. Very simple in construction, so it will not get out of order. It is light too—only 2½ lbs. The price is right. Sample 40c. Discounts on application.

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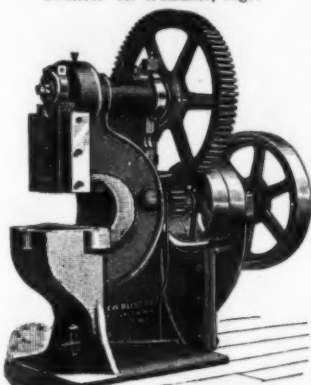
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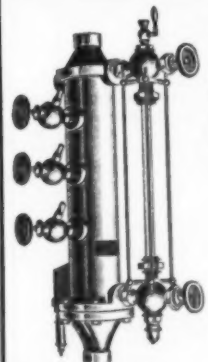
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Superior to steel castings.

Our steel is made expressly and solely for us. Dies forged under our system will cut 10 to 25% more blanks than others before regrinding.



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Safety Water  
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Save Fuel,  
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For all of the varied purposes for which they are used in

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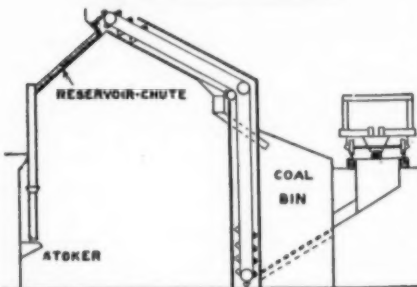
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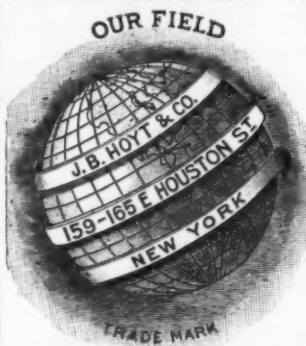
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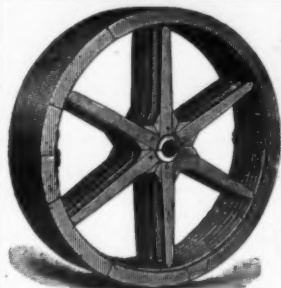
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Conveyors.

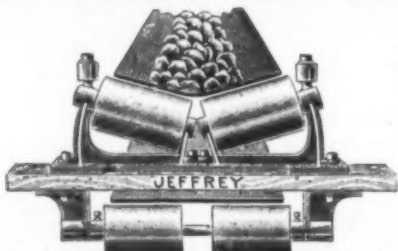
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## "CENTURY" RUBBER BELT CONVEYORS.

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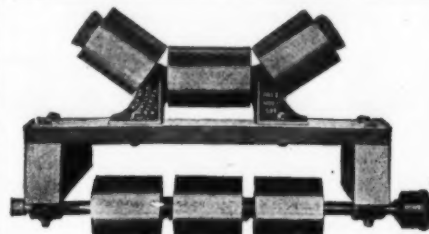
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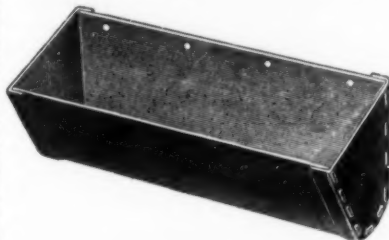


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For handling Ore, Coal, Stone, Sand, Fertilizer, etc.

**ROBINS CONVEYING BELT CO., 147-149 Cedar Street, NEW YORK.**



## Without A Rivet,

Thus insuring a smooth inside surface and free delivery. Any gauge or length of bucket of one continuous body piece.

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on the market for handling Mill Products and Grain, Clay, Coal, Ore, Sand, Broken Stone, Phosphate Rock, Quartz and other rough, hard or heavy substance. Made in any size required from a thimbleful to a bushel.

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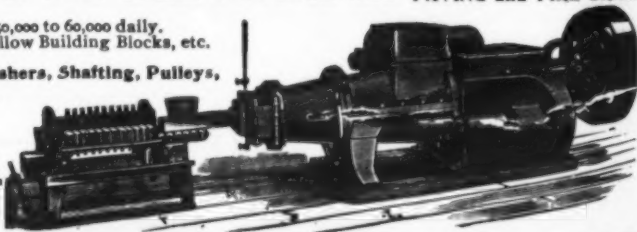
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Drain Tile, Hollow Building Blocks, etc.

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Hand or Power.

We can supply anything needed in this line.

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Also Repressed Front Bricks in every variety and Vitrified Paving Bricks.

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# LEATHER BELTS of PURE OAK TANNAGE.

High-Grade

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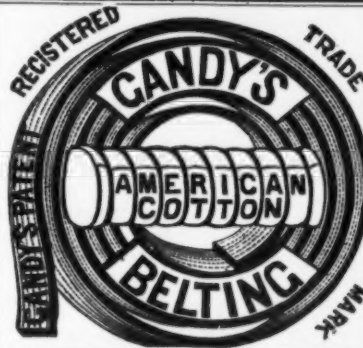
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It is the Cheapest, Strongest, Most  
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Sewed Cotton Duck Belting.

Especially adapted for Main Drives, Saw  
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all places where belts are subjected to mois-  
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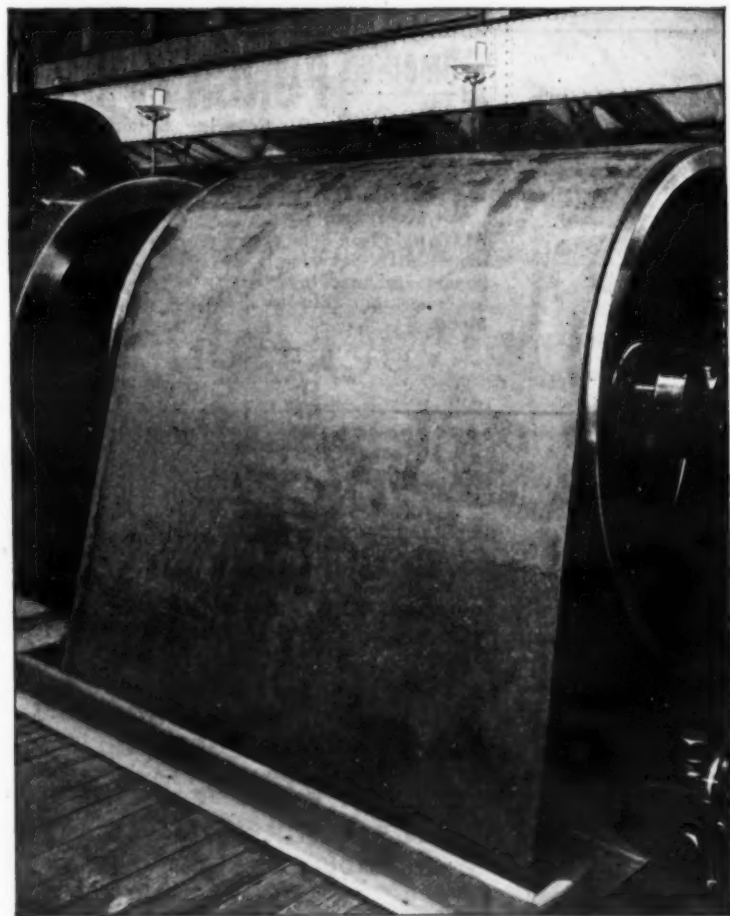
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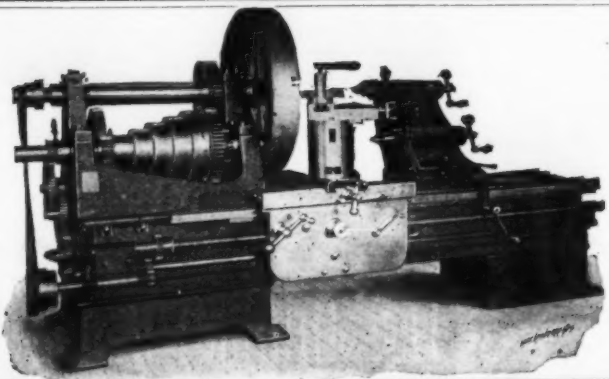
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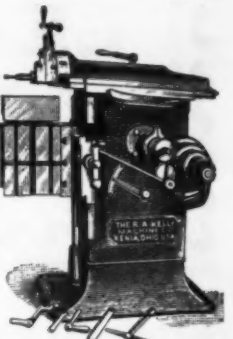
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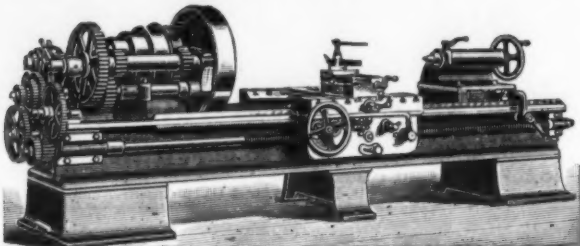
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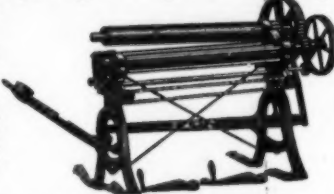
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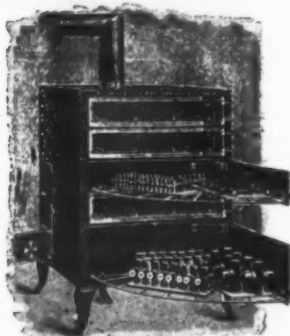
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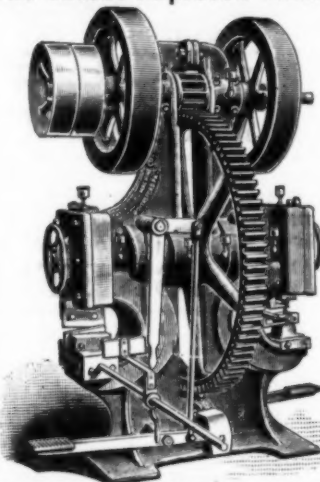
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Counter shaft should make 165 revolutions per minute.

WEIGHT, 5000 LBS.

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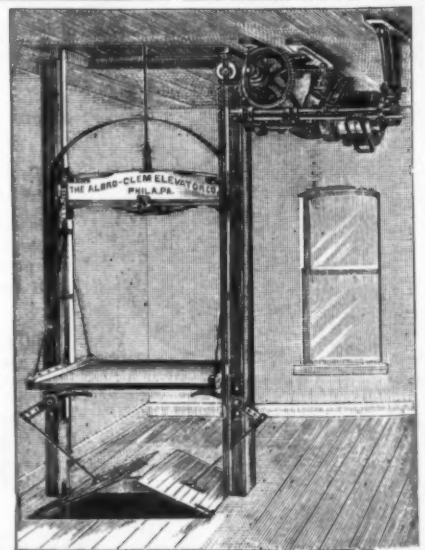
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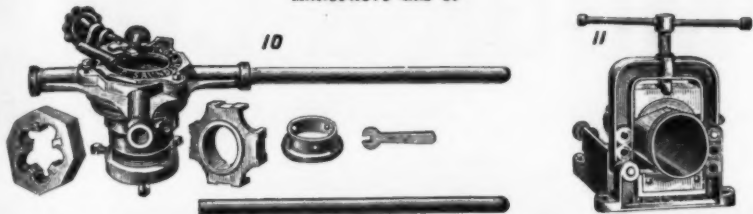
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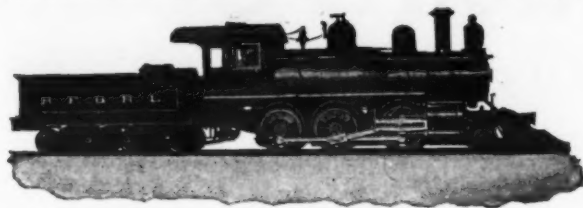
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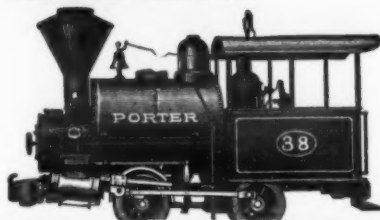
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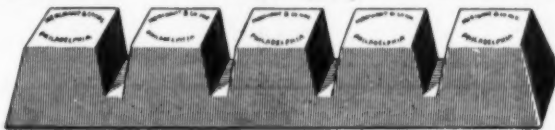
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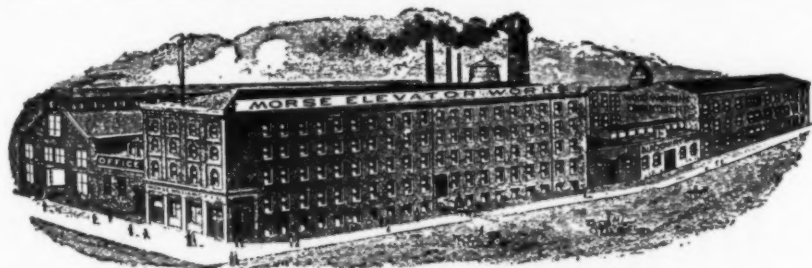
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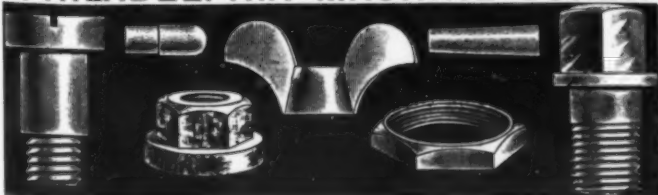
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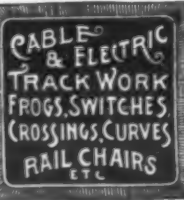
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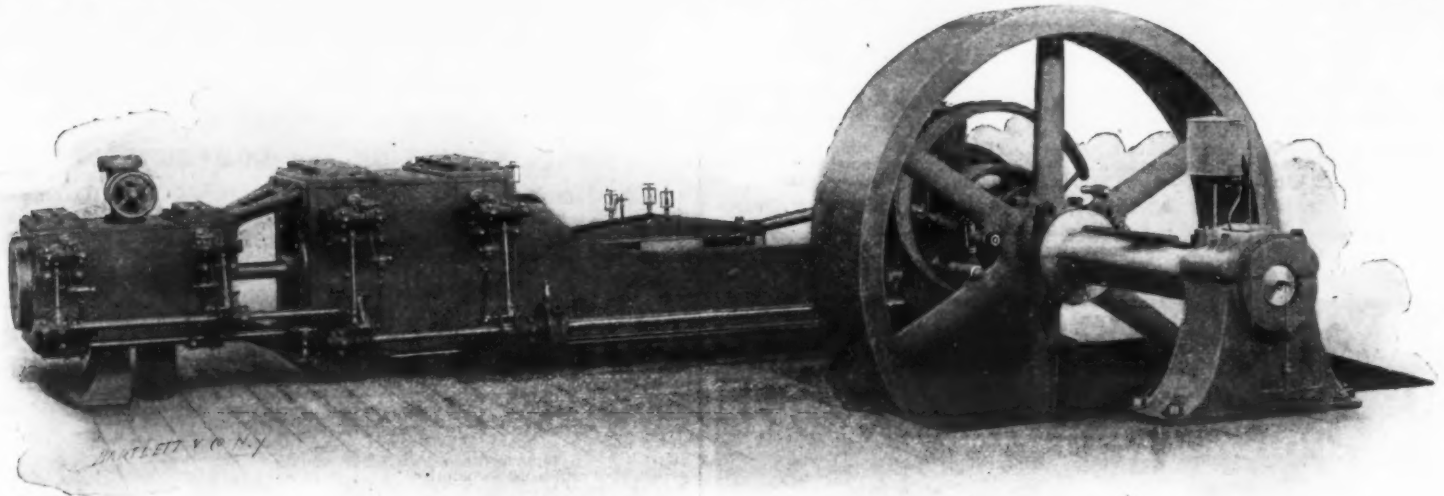
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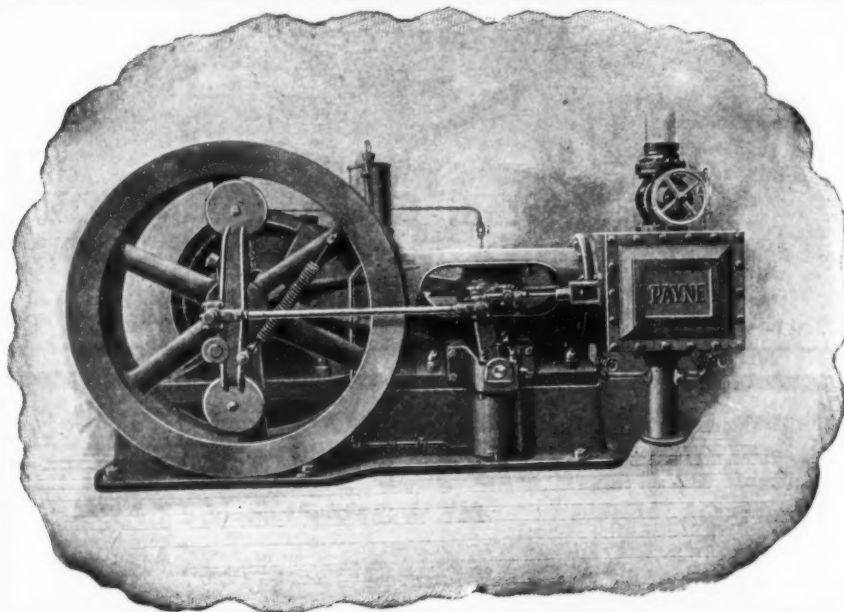


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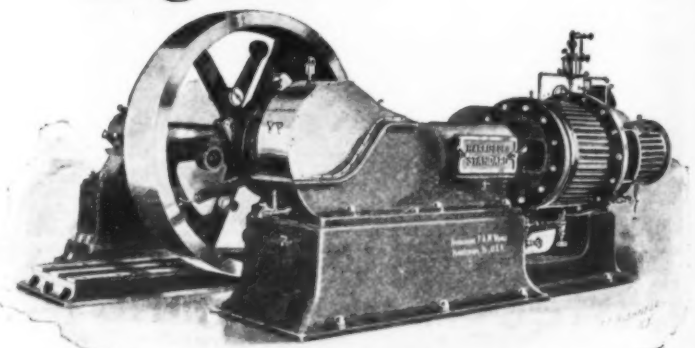


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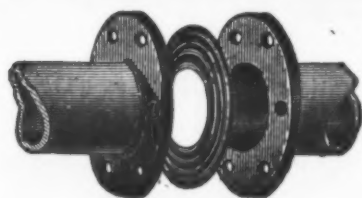


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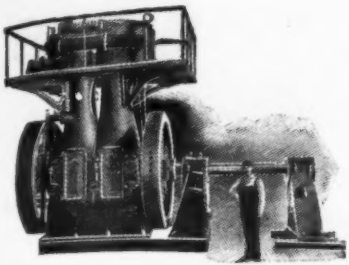
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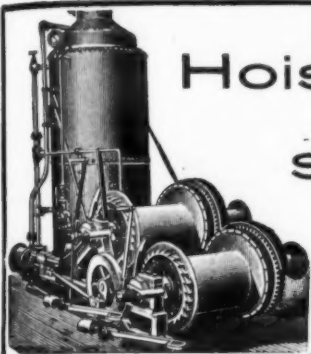
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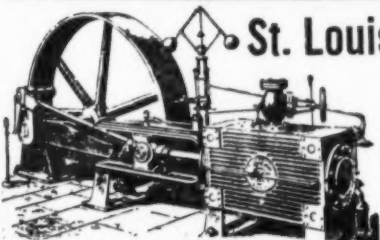
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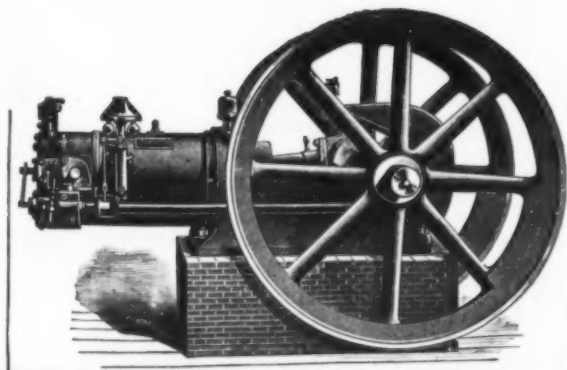
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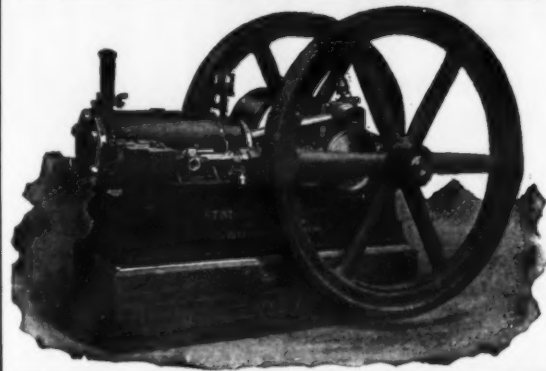
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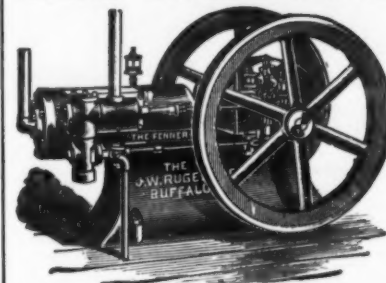
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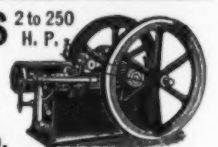
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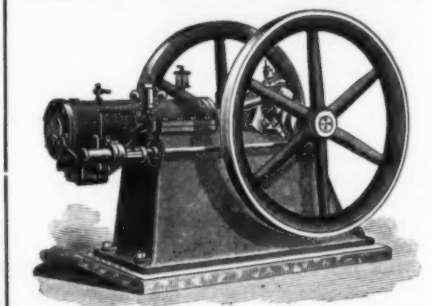
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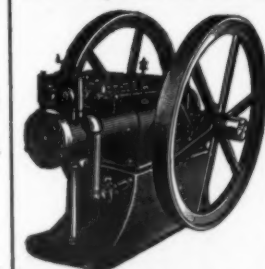
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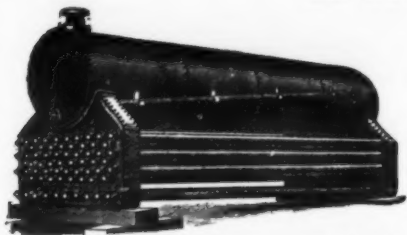
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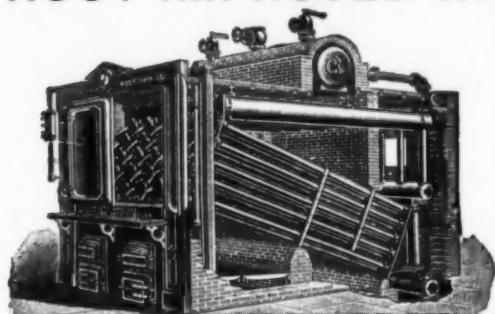
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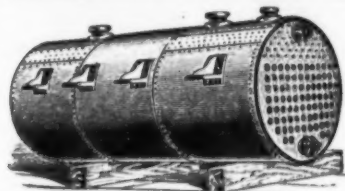
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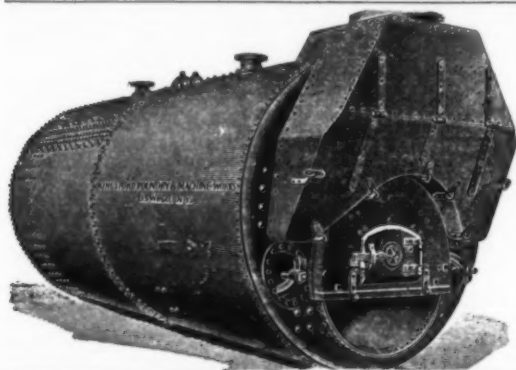
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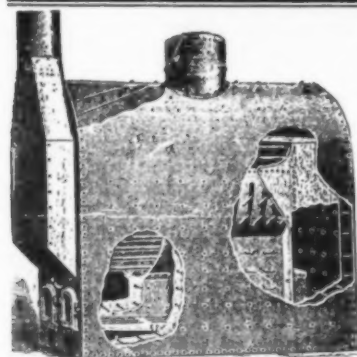
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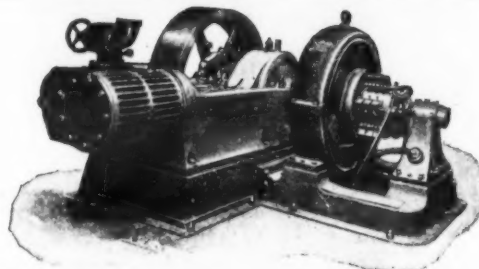
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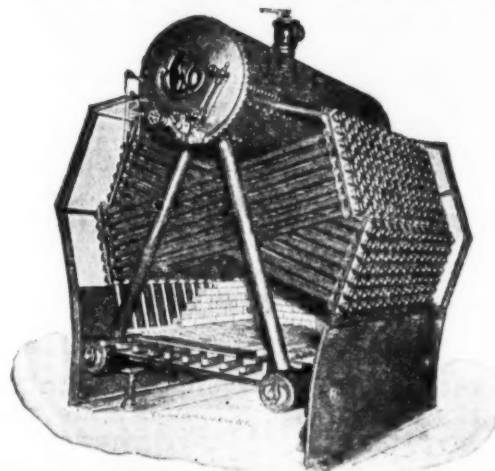


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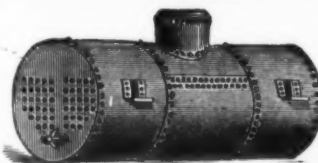
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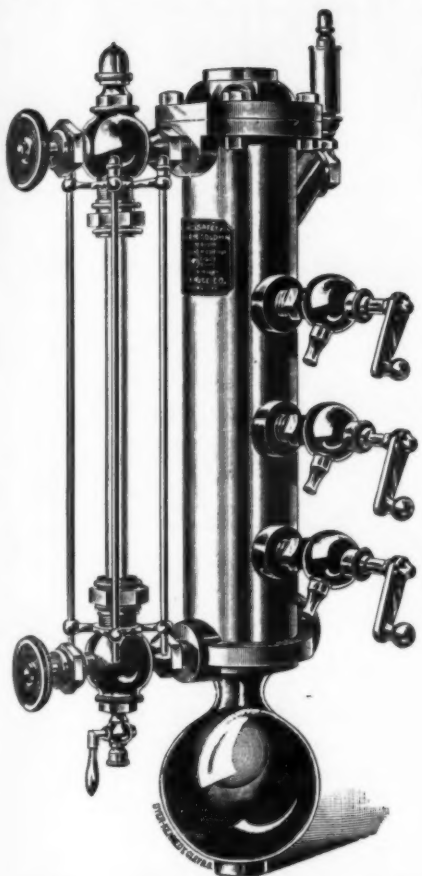
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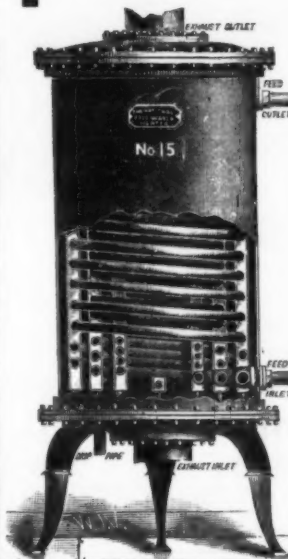
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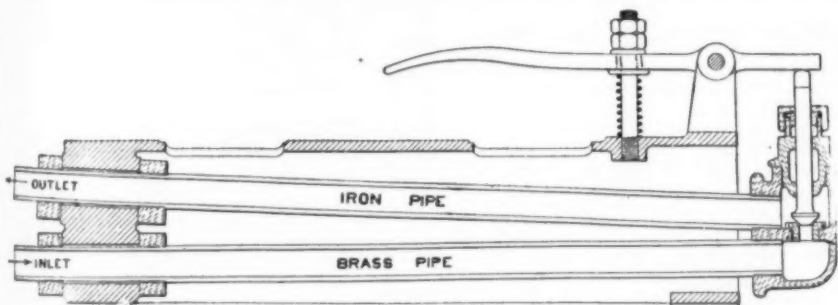
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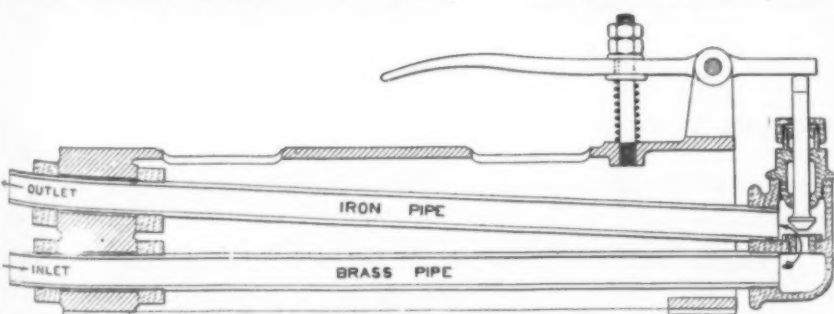
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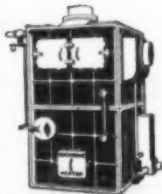
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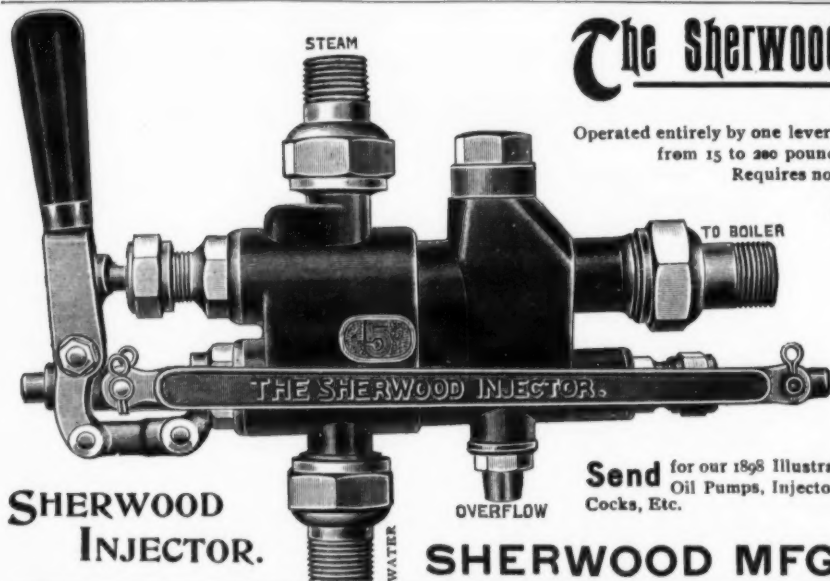
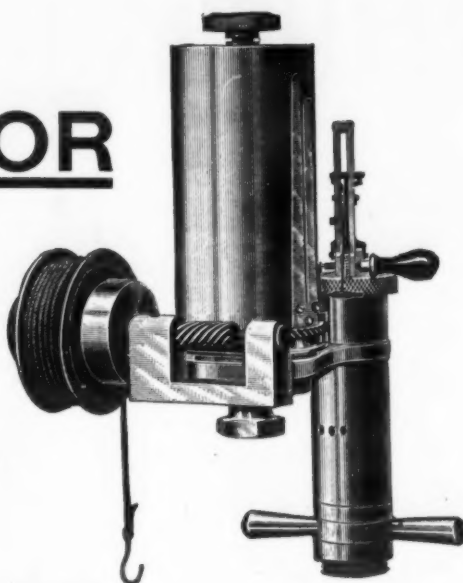
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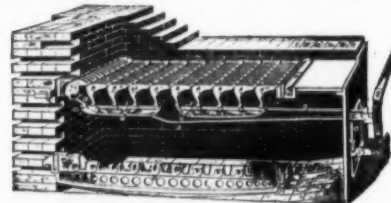
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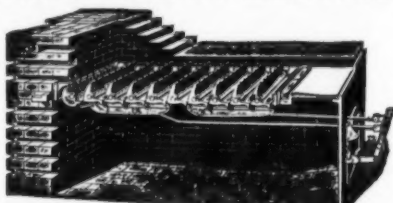
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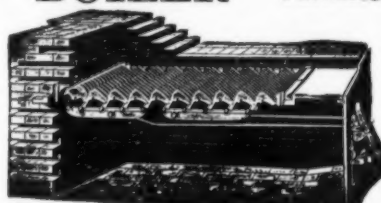
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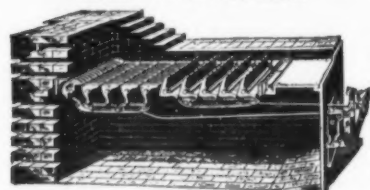
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WHOLE CUT-OFF MOVEMENT.



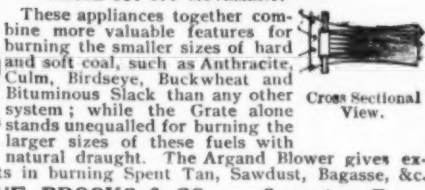
SHAKING MOVEMENT.



DIVIDED CUT-OFF MOVEMENT.



Argand Steam Blower.



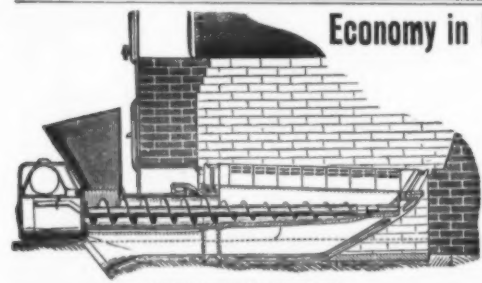
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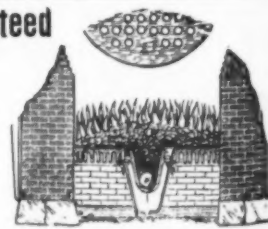
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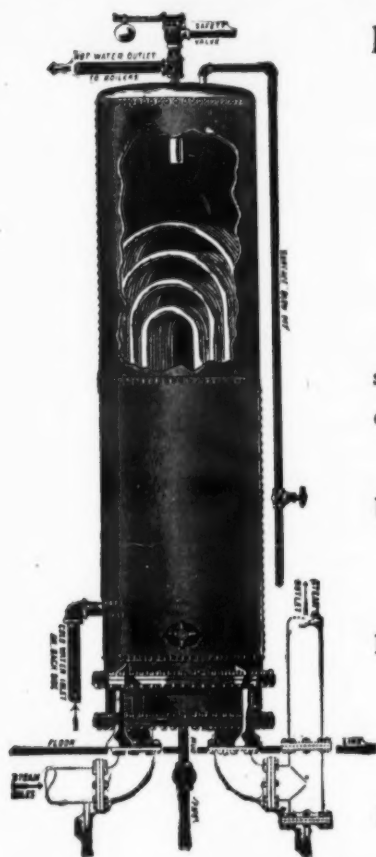
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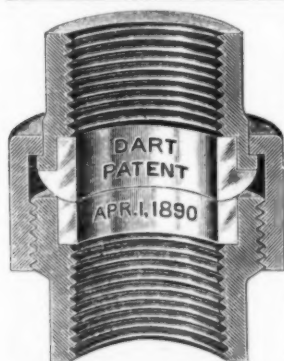
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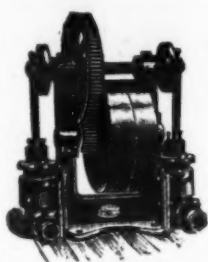
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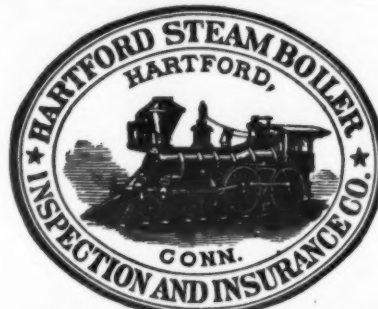
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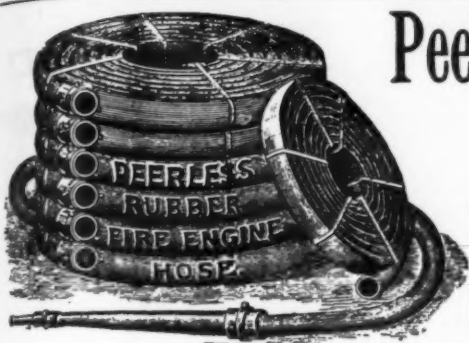
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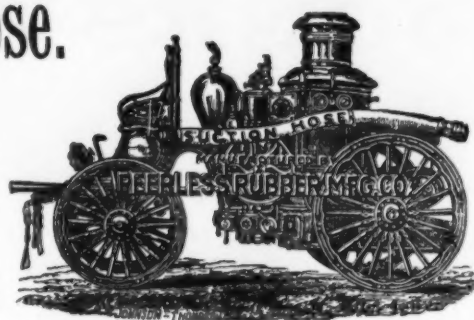
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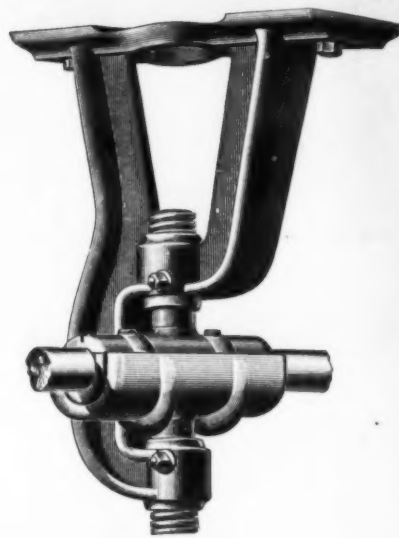
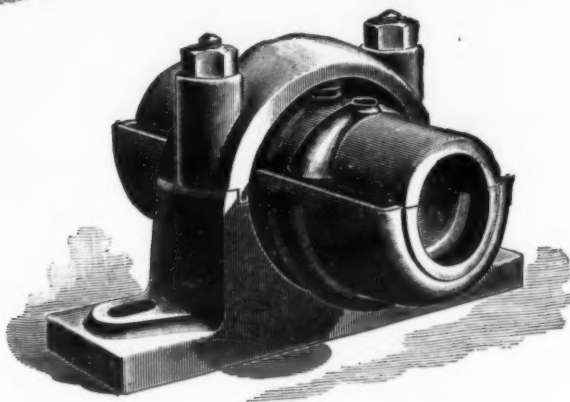
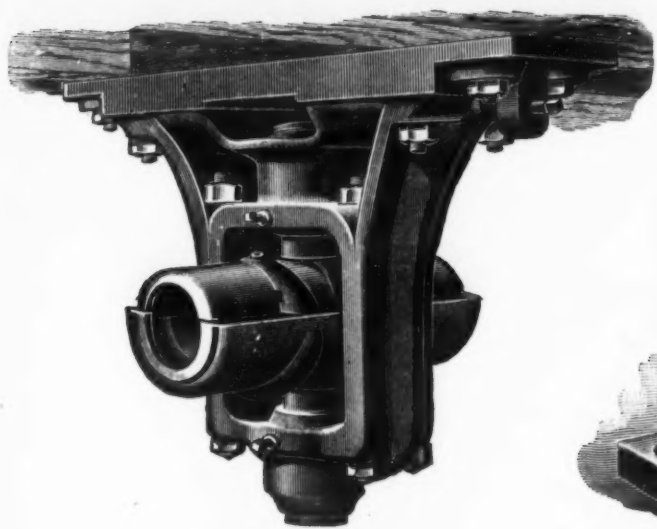




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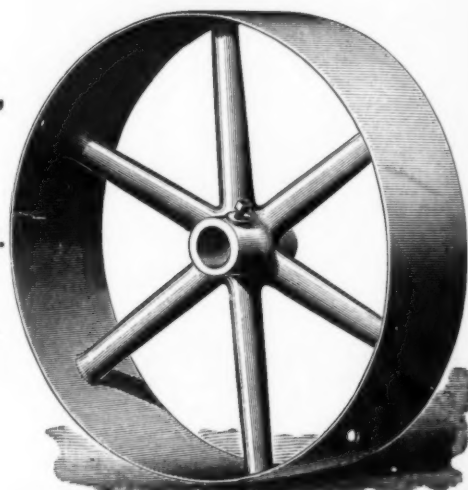
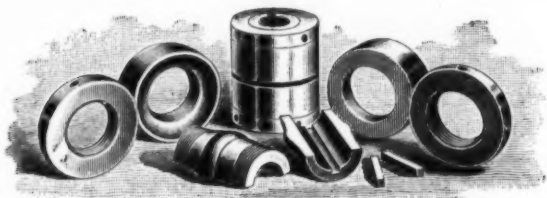
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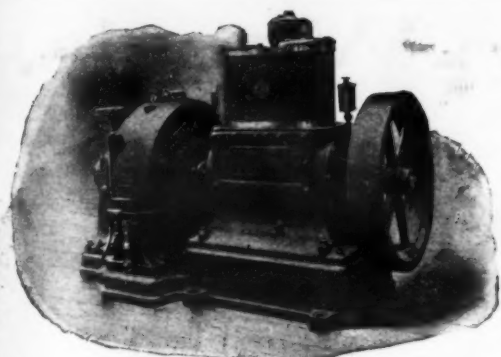
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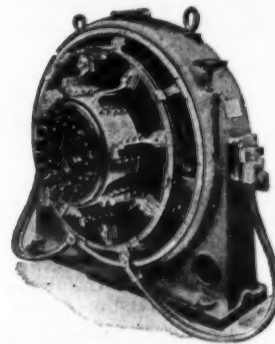
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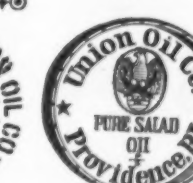
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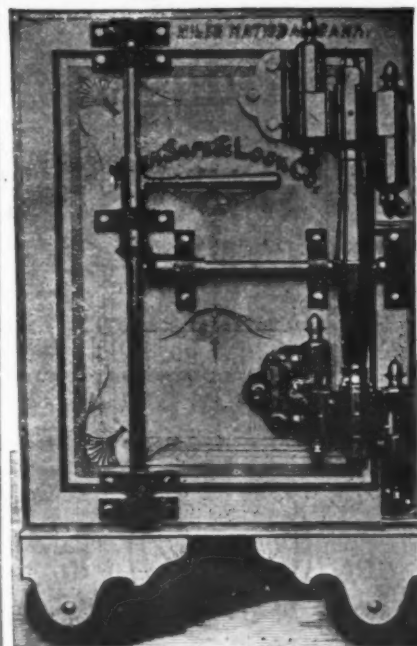


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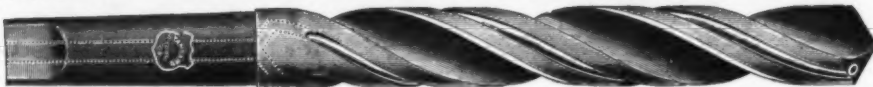
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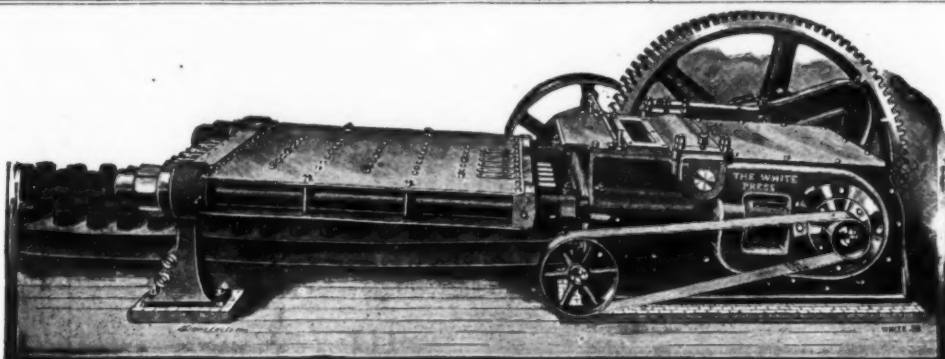
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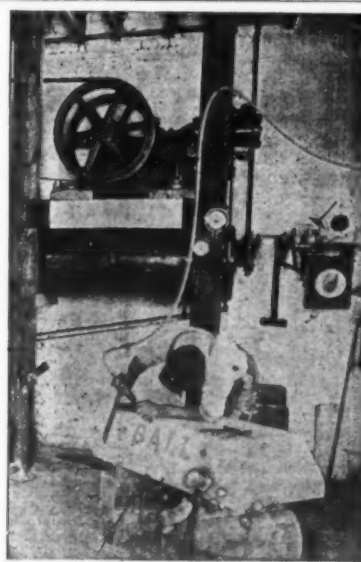
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# MANUFACTURERS' RECORD.

A WEEKLY SOUTHERN INDUSTRIAL, RAILROAD AND FINANCIAL NEWSPAPER.

VOL. XXXVI. No. 6.  
WEEKLY.

BALTIMORE, SEPTEMBER 1, 1899.

\$4.00 A YEAR.  
SINGLE COPIES, 10 CENTS.

## Manufacturers' Record.

PUBLISHED EVERY FRIDAY BY THE

Manufacturers' Record Publishing Co.

RICHARD H. EDMONDS, President.

OFFICE: MANUFACTURERS' RECORD BUILDING,  
BALTIMORE.

RICHARD H. EDMONDS,  
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BALTIMORE, SEPTEMBER 1, 1899.

### "Without a Peer."

In a letter to the Manufacturers' Record, under date of August 19, Mr. E. E. England, secretary of the Mobile (Ala.) Chamber of Commerce, writes as follows:

If you will pardon me for saying so, your journal as an advertising medium is without a peer. In your issue of August 11 your journal had a seven-line notice of a cotton mill to be erected at Mobile. If I have received one I have received no less than 200 letters up to date, all the outcome of that short notice, and these letters do not come from one section, but from all sections of the country.

### For Foreign Trade.

Preparations are nearly completed for the opening on September 14 of the National Export Exposition at Philadelphia, to continue until November 30. The undertaking, under the joint auspices of the Philadelphia Commercial Museum and the Franklin Institute of Philadelphia, has received the sanction and the financial support of the federal government, of Pennsylvania and of Philadelphia, while many States and the leading cities of the country where manufactures center, together with more than 200 trade organizations, have planned to co-operate through exhibits and active participation. The exposition is unique, in that it is a pioneer in a plan to gather, for the enlightenment of foreign buyers, an exhibit of every line of American manufactured products which is, can or may be exported, from locomotives and the heaviest kind of machinery to the simplest novelties. In connection with the home-products display, which must benefit American manufacturers particularly, will be a department of foreign manufactured goods, consisting of samples made in the commercial countries of Europe and successfully sold in all foreign markets, which has been made by commissioners of the exposition, aided by the consular service of the United States. These samples will be valuable as showing American manufacturers just what competition they must meet, as well as the peculiarities in the demands of every foreign market. Another valuable adjunct will be a department illustrating the best methods of packing, labeling and shipping American goods in order to meet the requirements of foreign trade.

On October 10 the international ad-

visory board of the Philadelphia Commercial Museum will meet in the exposition auditorium, and in connection with it an international commercial congress. To it every foreign government has been invited, through the State Department, to send an official representative, and hearty responses have been received from Great Britain, showing that Ireland, Scotland, Queensland, New South Wales, Victoria, New Zealand and Tasmania will be represented with the mother country, from Canada of its own accord, from Mexico, France, Germany, Italy, Austria-Hungary, Honduras, Japan, China, Sweden, Switzerland and other countries, while delegates from commercial organizations all over the world will be represented.

This congress will be by no means the least important of the features of the exposition. Properly constituted, it ought to become a powerful incentive to closer trade relations between the United States, the great exporter of manufactures, and foreign nations for the benefit of all parties concerned. Its delegates will have an opportunity to discuss existing difficulties of commercial relations, and from the standpoint of practical business men, to suggest remedies. They will study specimens of the output of American industry, and will return to their respective countries impressed not only with the enormous capabilities of the United States, but with the special advantages of the products of the individual firms which have been wise enough to secure space at the exposition, and with the enterprise of communities which have furthered it to success.

### An Aid to Industry.

Among the influences contributing to the existing industrial activity in the United States, of which evidence increases each week, is the work done in recent months by the National Association of Manufacturers. One of the correspondents of the Manufacturers' Record, who looks for a steady increase of export trade in almost all lines of American manufactures, makes this prediction:

The splendid work that has been done and is being done by the National Association of American Manufacturers in opening up foreign markets for American goods will keep the wheels of the shops moving with profit to the country at large until the Japanese and Chinese catch on and cut us out in some places.

The writer is but one of many men who have come to appreciate the advantages of the method of co-operation in advancing this country's trade interests abroad offered by membership in the association. That body, under the presidency of Mr. Theodore C. Search, has become an active factor and a permanent one in the industrial life of America, and each year is marked by an extension of its field of useful activities. That it is growing also in popularity is demonstrated by the steady increase in its membership. That has advanced since April, 1898,

to July, 1899, from 849 to 1067, an addition of 218. Of the members, only forty-six hail from the South, their numbers by States being Louisiana thirteen, Maryland twelve, Alabama four, West Virginia four, Tennessee four, Kentucky two, South Carolina two, Georgia one, Mississippi one, North Carolina one, Texas one and Virginia one. Their increase during the fifteen months has been but twenty-four.

These figures seem to indicate that the manufacturing interests of the South are not giving to the association the support warranted by its certain value to the section, which, because of its importance as an iron and cotton producer, to say nothing of its other industrial capabilities, developed or yet to be developed, must be vitally concerned in the building up and widening of the markets for American manufactures. Southern manufacturers may be assured that they can make no better investment than the membership fee in the association. They may hardly fail to share to some extent in the benefits flowing from the exertions of the organization in behalf of American trade. Those benefits will be enlarged with the enlargement of means for their cultivation derived from accessions of members. The South should do its part in helping on the good work, in full knowledge of the excellent results to be obtained. Those Southerners who are already enjoying membership should take particularly to heart the following suggestion of President Search alluding to statistics of growth:

Large as this growth has been, I am sure you will agree with me that it does not in any way represent what might properly be considered as a limit for the number of manufacturers who can be benefited by the work of this association, and who ought to give it their support. The aid of our members in extending the membership is far more valuable than any other agency we can command. Surely your wide acquaintance with the manufacturers of the United States must embrace some who are not members of this association, but who ought to be, and who will be glad to join upon your recommendation.

### Southern Town Builders.

Mr. H. M. Barrow of Concord, N. C., who is connected with the Odell Manufacturing Co., in a recent interview in the *Louisburg (N. C.) Times*, condensed a great deal of practical suggestions about the cotton mill as a town builder. His argument, summarized, is as follows:

1. It gives employment to numbers of people and thereby increases largely the consumption of merchandise and other material.
2. It opens a permanent market of lasting benefit to the farmers.
3. It brings to the town machine shops, repair shops and other industries, and with them intelligent citizens.
4. It improves the social and moral status of persons who become operatives.
5. It makes permanent the value of other property in the community, and,

securing a permanent investment of from 8 to 25 per cent., opens a field for outside capital to invest.

He stated that whenever, in the Piedmont section of the South, competent persons desired to erect a cotton mill, they had only to make it known, and at once a uniformity of action and all the necessary combinations of capital were ready, and that the cotton mill was a centering point for exercise of public spirit. The great majority of the Carolina mills have found the bulk of their capital at home, but after a manager has demonstrated his ability, or a mill has been successful, outside capital has readily been secured for new mills or for enlargements. Very much, however, depends upon how and by whom the matter is presented to Northern people. Many gilt-edge enterprises fail to command outside attention because they are badly handled. In this time of prosperity, good towns having any special advantages for cotton manufacturing ought to be able to secure a mill. This may sometimes be done by inducing Northern mill-owners to build a mill, the local people furnishing possibly only a site and a trifling bonus, but this means hard work to attract the attention of such people. Huntsville labored for a year or two on one particular mill company and spent \$10,000 or \$15,000, but finally captured a \$2,500,000 mill, which will lift that place from a small town to a city, for at the start it will add about 15,000 to its population. In other cases, where local people of good ability and standing unite to build a mill and raise a fair part of the capital, they can, if the matter is properly handled, generally get the balance elsewhere. A writer in *Wade's Fiber and Fabric*, discussing this from the New England standpoint, makes some suggestions which are worth considering, notwithstanding some errors in his statements. Asserting that Northern textile journals, numbers of trade backers and other prominent men were receiving many letters from hundreds of places in the South, making offers of all descriptions and holding out all sorts of inducements to many Northern people to furnish all or at least the greater part of the money for mill building, he says:

Such letters do not receive any particular attention any longer, because they are too numerous, too one-sided and in many cases were written on the spur of the moment, without a real substantial backing of the local business element. Especially Northern textile machine builders are overwhelmed with inquiries as to the cost of erection, equipment and running of mills of all capacities, so much so that some of these firms have circulars printed giving in general terms information asked and sending them out in reply to such letters without losing much time considering the special conditions, as those men have found out by experience that such labor in ninety-nine cases out of one hundred had been lost. Only cases that prove to be substantial and asked in good faith receive their special and careful attention. If a community in the South expects to interest Northern capital in the erection of a mill the Northern investor expects the citizens of such a community to furnish the bulk of the capital, which is no



more than right, as he may expect to see its people back up their sanguine hopes by the investment of their own money. The Northern will come down and manage such a mill, and to show his good faith will invest quite a sum in the enterprise, but this is possibly all Southern cities can and may reasonably expect under the circumstances. The North has the pick of locality from among hundreds, nay, thousands of such solicitations, and the Northern capitalist can almost dictate his own terms, because of such competition among Southern cities to erect cotton mills. Of course, the best offers secure the prizes. I say to Southern men, do not think about building cotton mills in your city unless you have an actual and a fair proposition to make, which is backed up by the subscriptions of your business men and who mean business; don't expect the Northerners to furnish all the money, but back up your expectations by the investment of your own money; then only, and only then, will you be able to get Northern capital to listen to your scheme.

It is very true that the Northern investor has hundreds of places from which to select, and hence, other things being equal, the successful place is the one which "keeps eternally at it" in seeking to attract capital from elsewhere for its development.

#### RAILROAD OBJECT-LESSONS.

##### What Transportation Lines Are Doing for the South.

In the report of the Southern Railway Co., published on other pages of this week's Manufacturers' Record, is furnished an opportunity to study the effects of strenuous, practical and broad-minded administration of the great railroad system upon a country fortunate enough to be contiguous to it. The five years of President Spencer's administration have been marked by a wonderful transformation in the physical condition of the once loosely jointed or disjointed lines now in one compact system, ever stretching out to new neighborhoods, and always ready to acquire additional lines and to infuse them with the spirit of the whole. The same period has been marked by a great development in the natural resources of the South, the strengthening of established industries resting upon cotton, iron and coal, the inception of new ones and the migration from other sections of a sturdy class of agriculturists. These changes have been for the benefit both of the Southern Railway and of the South.

They have been a great object-lesson, which has other illustrations in the beneficial effects of business-like railroad methods upon the upbuilding of Southern seaports, such as Galveston, with the Southern Pacific; New Orleans, with the Illinois Central; Mobile, with the Mobile & Ohio; Pensacola, with the Louisville & Nashville; Newport News, with the Chesapeake & Ohio, and Norfolk, with the Seaboard Air Line and Norfolk & Western, as well as with the Southern.

These object-lessons are working effectively in overcoming the prejudices founded largely upon an ignorant acceptance of statements of persons who have betrayed their trust as leaders of their people, and are being reinforced by frequent sensible advice from Southern newspapers as to the attitude which the people should take toward railroad development. One of the most prominent of the newspapers at present engaged in this practical campaign is the Arkansas Gazette of Little Rock. It has for months been active in the advocacy of plans to encourage railroad building in its State, and its arguments may be viewed in condensed form in the following statement from its columns: "There should be no hindrances to the development of the resources of Arkansas. Every honest proposition to build a railroad through any of the undeveloped sections

of the State should be encouraged. A few hundred thousand dollars donated to railway enterprises will bring millions of dollars in cash every year to the State. And all this money will be distributed among the people." Gainesville, Ga., has the opportunity, according to the Georgia Cracker, to bring two railroads to it. This leads the Cracker to say:

"This is a critical time in the city's history. Gainesville is to either get these railroads and make great strides of progress, or it is to let them go elsewhere and remain at a standstill while other towns boom. We do not believe that our people will let the opportunity pass without taking advantage of it. Let everybody go to work to get these two railroads, and thereby help Gainesville on to greater prosperity. Extend to capital, whether from the North, South, East or West, a hearty welcome, that more railroads may be built, more manufactories established and the wonderful resources of our city and section may be properly developed."

This is a specimen of the editorial attitude of a constantly-increasing number of Southern papers, shown also in the advice of a North Carolina weekly that its readers should favor railroad construction, so that an outlet may be furnished to Eastern and Southern markets for the numerous products of its section, and its statement that the voting by one county for bonds to be used in building the road "was the best day's work that has ever been done in the history of the county, and but the beginning of the development of one of the richest and most desirable sections of North Carolina." These views are backed up by letters from intelligent observers, who point out the practical advantages to flow from an encouragement of the railroads. A combination of these opinions is doing much to strengthen a healthy public sentiment for transportation systems in a section dependent largely upon them for its thorough sturdy growth. While it is important to many communities to secure new roads, it is of vital importance to the whole South to liberally encourage and support those already in existence. Their prosperity will mean the prosperity of the whole South.

#### THE STORY OF ACTIVITY.

##### Leading Manufacturers Bear Witness to Its Reality.

In addition to the great number of letters published in last week's issue, the Manufacturers' Record has received reports from several representative manufacturers continuing the story of activity in many lines of American industry related to the development of iron and steel manufacturing. The letters follow:

##### No Cause for Complaint.

Joseph W. Wall, secretary the Gardner Governor Co., Quincy, Ill.: "We have nothing to complain of in our business for the past six months or one year. Our shops have been fairly crowded with work, and the prospects look to us very healthy indeed. As you are probably aware, we have two distinct departments in our business, one for the manufacture of the Gardner governor and the other for the manufacture of the Gardner pumps. Business in both departments in comparison with former years has been larger than we have ever experienced heretofore. We have had our plant taxed to its utmost capacity, and have added several new machine tools in the past few months, with the idea of enlarging our output. Our stock of goods is not quite as large as we had at the same period last season, but we could scarcely expect it, in view of the very satisfactory business that we have been doing. Our

foreign trade has improved somewhat, but does not receive the attention that we expect to give it, owing to the much home demand."

##### With Full Hands.

N. P. Pratt Laboratory, Atlanta, Ga.: "There is unprecedented activity in the several lines in which we are engaged. While there is not a large number of new chemical companies being formed in the Southern States because of the doubt as to the policy of some of the larger combinations of capital controlling a large part of the fertilizer business, still there are steady improvements going on, particularly in connection with the independent plants, and some of these are increasing their capacity by building works at other points. We are glad to say we have our hands full in this line of work, and we regard the whole situation as healthy and in every way satisfactory from our standpoint. In connection with our analytical and assay work, we have had the largest business we have ever had for the months of June, July and August, and the promise for a still greater volume of business during the fall and winter is most flattering."

##### Sold Months Ahead.

W. H. Kirchhoff, treasurer Steel & Iron Metal Coating Co., West Chicago, Ill.: "Business is exceptionally good with us. We have sold our entire product for the next three months, and, judging from the manner the orders are coming in, it will be necessary to double our facilities within the near future. We certainly feel that business with us will not only continue as good as it is, but it will even increase in activity during the remainder of the year. We have received a large call for aluminum-coated sheet steel from foreign lands, but on account of business being so exceptionally good with us, we have been compelled to decline orders for foreign markets."

##### Output Absorbed at Home.

James S. Ray, general manager National Coal & Iron Co., Louisville, Ky.: "I find the market for coke quite active, having orders about double our capacity for production. We carry no raw material whatever. The coal market is not so active as the coke, but is better than last year. In our line the market seems to indicate continued activity and prosperity for at least five to ten years. Our entire output is absorbed by our home market."

##### Third Banner Year.

James McBrier, president the Ball Engine Co., Erie, Pa.: "By comparison of the present day our business is as good as in '91 and '92, which years were the banner years in our history. Our orders, depending on the size of the machines wanted, are from three to six months ahead of our production. We are carrying more than the average amount of raw material, and goods in process of construction and parts finished are in excess of the average carried in stock for the past four years. We look for two or three years of activity. The one dark spot is, will the consumption be slowed up because of the increase in prices, especially in iron and steel? Comparatively cheap iron, the writer believes, is necessary to a continued prosperity, and therefore looks upon the excited price of pig iron with doubts as to its being long continued. How long, no one can say."

##### The Overflow Trade.

Nathan B. Payne, Payne Engineering Co., New York, N. Y.: "From our own standpoint business is excellent, and we expect it will continue so for several years. We have not been able to accumulate any manufactured stock, as has been our former practice, and find it most difficult to keep up with our orders. Our

foreign trade is increasing, but the most of the present activity is due, so far as we are concerned, to the home market. As we view the situation, the increased foreign demand is due largely to the fact that we are getting the overflow trade that ordinarily goes to European concerns. We hope that American manufacturers generally will so treat these present foreign orders, in regard to quality and prices, that the trade will permanently remain here after the rush on the other side has ceased."

##### Southern Trade Improving.

Cambria Steel Co., Northwest Department, Johnstown, Pa.: "Our business has increased twofold since the first of the year, and, in our opinion, briskness of trade is with us to stay, as it is the result of a healthy growth and not a mere replenishing of stocks for a season. It seems as though the supply is insufficient to meet the demand, and all outlooks point to a continuance of a strong demand for goods in our line. Our special line of roofing materials for Southern climates, i. e., asphalt ready roofings, asphalt roof coatings, etc., are meeting with favor, and our Southern trade is very brisk and steadily improving."

##### Are Extremely Busy.

C. S. Garrett & Sons, paper manufacturers, Philadelphia, Pa.: "We are extremely busy, and have been throughout the entire year, but do not think the average is any greater than it has been in the past, with the exception, possibly, of last year. This year's business is considerably ahead of last year's. We have orders that will keep us running all our mills the balance of the year and longer. Owing to our production being so large, we are short of raw material, and are not carrying as great an amount of raw stock as we usually do. In regard to foreign trade, as we find our domestic business absorbs all our production, we cater very little for foreign trade. The prospects for continued good business are very bright. We have been unusually busy during the months of July and August, which months are usually quiet, and we look for a very active fall business. Orders are very plentiful. Owing to all the mills being so loaded up with orders, the consumers are anticipating their wants, and on account of the increased amount of business, it is difficult to make prompt shipments. The general feeling throughout the trade is one of confidence. The volume of trade which we have had has come to stay for some time, and, judging from our own activity, we should say we do not expect any lull for several months to come."

##### Rusk's Foundry at Work.

[Special Cor. Manufacturers' Record.]

Rusk, Texas, August 26.

Some four months since there was inaugurated a movement here to erect and operate an iron foundry on a large scale, capital \$20,000. The stock was subscribed by home capitalists and the work began; \$9000 were expended in the erection, and last week the first cast was made, proving a success in every particular. Dr. McCord, the president, and Mayor Blevins untied the first ladle, making two pairs of the most exquisitely-designed andirons. There is in molds stove plate, teakettles and a large variety of other hollowware, etc. It is thought to be the most extensive plant of the character south of St. Louis. And the "Kavanaugh" iron foundry is another added industry in Texas and the South. Large crowds have been about the plant all day giving evidence to their enthusiasm. They have large orders ahead.

JOHN M. CLAIBORNE.



## BUYERS ARE COURTING.

## The Fair Condition of the Birmingham Iron Market.

[Special Cor. Manufacturers' Record.]  
Birmingham, Ala., August 29.

The demand for iron the past week was very fair, although it was not as heavy as it was during the week preceding. There was no advance in prices until the last day of the week a 25-cent increase was announced. Trouble about prices is nominal. There seems to be a settled feeling among buyers that to provide for their future wants they must secure the iron now for long delivery at prevailing prices. More or less caution, too, is hedging about these long-delivery sales. The leading interest states that on some grades they are about sold up for first half of 1900 to anticipated output, and will therefore for these grades be out of the market for that delivery on further orders. This action will naturally tend to widen the business for the last half of 1900. There was some acceptance of good orders the past week, ranging in quantity from 5000 to 1000 tons. Western buyers were most prominent. Gray forge is now marked up to \$14.25. There were sales of No. 4 foundry at \$14, but that is now \$14.25; No. 3 foundry is \$15 to \$15.25; No. 2 foundry is \$15.75, and basic iron is around that price also; No. 1 foundry is \$17 to \$17.25, and silver gray is \$18.25. There isn't a particle of excitement in the market, and there is no anxiety concerning sales. The buyers are doing all the courting, and the furnaces are considering all their pleas and awarding iron according to their weight and influence. The fact that additional furnaces will in time blow in has no effect yet of an injurious nature on prices.

One of the parties interested in the Trussville furnace reported that it would be in blast within thirty days. He was endeavoring to secure necessary labor here to man the furnace when ready for operations. Making allowances for unexpected disappointments, we may anticipate that they will be in blast during October. The Cedartown Furnace Co., the Cherokee Iron Co. and the Western Mineral & Mining Co. have joined interests and entered into a combine on a capitalization of \$1,300,000, half of it being preferred 7 per cent. stock and half being common stock. They are charcoal furnaces. Negotiations are still in progress concerning other furnace interests, but progress being made is not divulged. No one outside the interested parties have reliable information on the subject.

At Bessemer the start given to improvements there is being steadily followed up. The plans being considered in connection with the large improvements are as yet only outlined. They are on a large scale, and in carrying them out Bessemer will be greatly benefited; in fact, the interest of one is the interest of the other. Considering the weather, the rolling mills have been turning out an unusual output of finished product, amounting to 150 tons per day. The scarcity of labor that was limiting operations they have in part rectified by accessions from the West. Both rolling mills yet are full of orders. Inquiries have been made of the various industries as to the profits afforded on finished work. The assertion is made that they have not kept pace with the advance in raw material. There may have been more or less bad judgment in anticipating the future, as there were doubting Thomases who guessed the wrong way. At all events, the shops are full of work. They are getting more and more aggressive in pursuit of contracts, and a foothold, when once obtained, is in nearly

every case permanently secured. The Hardie-Tynes Machine Co. has in the last few days secured contracts for four Corliss engines—one 500 horse-power for Atlanta, Ga.; one 400 horse-power for Memphis, Tenn.; one 250 horse-power for Griffin, Ga.; one 100 horse-power for local. Other shops have been as successful in their lines, and there are very few that have not orders entered that will assure steady work for three or four months ahead. The sale of machinery for mining and manufacturing purposes is a fair barometer of business in these lines. It has not only never been better, but it has never been so good, with the report added we are losing business every day to cause we cannot promptly procure what our patrons want. There is activity in all lines. There is a feverish restlessness about things, whether in building affairs or manufactured articles. Nothing hangs heavy on one's hands, for a buyer is ready to own what is offered for sale. Now that cooler weather is just ahead of us, we may expect the resumption of interrupted negotiations and the successful maturing of schemes that will greatly aid in the development of the district.

J. M. K.

## Eastern Iron Markets.

[Special Cor. Manufacturers' Record.]

Philadelphia, Pa., August 30.

The iron and steel makers now recognize that the pressure for deliveries during the remainder of the year will be beyond all possible capacity, consequently there will be an upward tendency in prices, which will naturally affect deliveries to be made next year. The tendency to buy for next year's delivery is stronger. There is nothing else to do. Business is crowding in, and manufacturers must secure stock and know what it costs. The recent advance of structural material in New York, \$5 per ton, merely records openly an advance that had already taken place. The advance of billets at Pittsburgh and the inability of makers to accept orders at the quotations named shows that further advances are probable. The inquiries coming to hand in our office every day show the condition of things as plainly as it is possible. There are more buyers than sellers for everything. The plan of buying ahead will be continued probably for months, or until there are signs of overtaking demand. Much new work is coming up for our shipyards, but it cannot all be taken. The new plant in South Camden has business offered to keep it busy two months. A 17-story office building, that will not be completed for a year, has already rented nearly every office. These are straws. The foreign inquiries for American locomotives prove that our locomotive ideas are right. The orders for all manner of machinery and supplies are growing steadily, and hardware factories see no sign of abatement. It is the same story everywhere. The pig-iron brokers are quoting best No. 1 X foundry today at \$23, and No. 2 X at \$22; gray forge has advanced to \$19; merchant bar orders are standing in line at 2 to 2.20, and special steel bars sell as high as 2.40; plate iron and steel range from 2.75 to 3 and shapes from 2½ to 3 cents. There is an urgent demand for scrap of all kinds. Old rails are \$22 to \$22.50, and old car wheels \$18.

Our mills are crowded and trained to turn out as much material as possible, and every day almost word comes of still new enterprises, from shipbuilding down to shop requirements. All kinds of machine shops are being more or less re-equipped, and this helps to swell the volume of machine-shop business.

The coming winter will be a remarkable

one in many respects. A great deal of capacity will be added, particularly in electrical directions. Business among electrical engineers is very heavy, and the export demand for American equipments is something surprising.

The National Export Exposition will open September 14. It is unnecessary to say it is an affair of national and international importance. The public who visit will discover much to admire. The one end kept in view is to open up trade throughout the world to American products. The representation of forty governments will be present. Popular attractions will be offered in the way of a plaisance and villages of foreign peoples showing domestic life, etc., but the main point will be to drive a big and long and thick wedge into the world's commerce in favor of America.

## PIG IRON THE PREMIER.

## Large Sales of Southern Forge and Basic Metals.

[Special to Manufacturers' Record.]

New York, N. Y., August 31.

In its review of iron and steel the Iron Age will say this week:

"Pig iron continues to be the leading line in the attention of the trade. Very large sales of Southern irons, notably forge and basic, have been made for delivery during the second half, Chicago, Pittsburg and Eastern Pennsylvania participating in the movement. It has caused a further advance, the sales being made on rising figures from \$15.50 up as high as \$16 for No. 2. Some of the large consolidations have been buying, and yet it is known that a considerable share of their requirements is still uncovered. Eastern cast-iron-pipe makers have also bought, taking about 15,000 tons for delivery during the first half of 1900. In Eastern Pennsylvania one steel concern has purchased the run of two furnaces for the year of basic pig on the basis of paying the price of No. 1 foundry.

"In the Pittsburg district, besides the sales of Southern iron, there have been some purchases of Bessemer pig. The report is revived that at an early date a leading steel interest will be forced to cover a shortage.

"The continued advance in pig iron and the eagerness to contract for 1900 delivery are beginning to tell on the views of sellers as to prices of steel and finished materials for next year. So far as we can learn, very little has been done thus far in steel billets for 1900. Present prices are not a criterion, since they represent forced purchases, but the current of events in pig iron seems to point unmistakably toward higher prices than those talked of some time ago.

"The recent sales of steel rails furnish an indication, but even now some rail-makers, notably those in the West, talk higher prices than \$30 at mill. This would indicate about \$28 and \$30 for billets East and West for 1900.

"In finished material advances are being made all along the line in rapid succession. Structural material, which is the only large line controlled by an association, and which has been held back for many weeks, has now been advanced \$5 per net ton. Plates have had another rise. Bars have stiffened. Tool steel has been put up to seven cents for common grades. Tinplate has been advanced twenty-seven and one-half cents per box.

"Importers have had a number of inquiries for material. There have been some sales of foreign ore, and it looks as though some business might be done in steel billets. There has been considerable talk of importing steel plates, and English advices continue to talk of lots of 10,000 tons and upward. We have been

quite unable to trace any such quantities, the largest single lot bought during the last month being one of about 1000 tons in order to secure prompt delivery, when the American mills could not promise it.

"As a matter of fact, aside from prices, it turns out that foreign makers can rarely promise better time than the domestic mills, and it is only when it is to be used for export work under the drawback system that foreign material has much of a chance. American manufacturers will generally study this phase more thoroughly than heretofore. We understand that in tinplate there have been considerable purchases on this account lately."

## WORKING ZINC MINES.

## Rich Ore Being Taken Out Near Roanoke.

[Special Cor. Manufacturers' Record.]  
Roanoke, Va., August 28.

The Roanoke Iron Co.'s furnace and rolling mill, located in the west end of this city, and which was sold several years ago under foreclosure proceedings, has just been resold to Philadelphia parties, and the furnace will be put in blast as speedily as possible. This is one of the finest furnaces on the Norfolk & Western Railway. The rolling mill will be worked in connection with the furnace, and the two will give employment to about 250 or 300 hands. The daily output of pig iron will be from 175 to 200 tons. The purchasers have been quietly buying ore properties, and will have ample supplies for the furnace.

The Martin zinc mines, about three miles south of this city, have also been sold to Philadelphia parties, who are now working them and taking out a large quantity of ore. This mine is proving to be very rich, and the purchasers have taken option on adjacent property. Negotiations have been pending for some days on another zinc property a short distance from this city, and contract of sale will probably be closed this week. Mining operations in this vicinity are now quite active, and with all the furnaces in blast there will be no room for idleness.

J. H. W.

## In Southwest Virginia.

[Special Cor. Manufacturers' Record.]  
Bristol, Tenn.-Va., August 30.

The Union Steel & Chain Co., recently organized by Eastern capital, has been negotiating for the purchase of iron-ore and coal lands in East Tennessee and Southwestern Virginia.

It is reported on good authority that the Three C's Railroad will extend its line of railroad, which is now in operation from Johnson City to Erwin, Union county, Tennessee, into the Cain Creek territory of the latter county, where it is said that vast forests of hardwoods abound.

R. Horneck, contractor, is getting out several hundred carloads of stone at Looney creek, Wise county, Virginia, to be shipped to Bristol to be used for foundations for tenement-houses for the laborers at the Bristol furnace, and also for the foundation of a depot to be built by the Virginia & Southwestern Railway Co.

The Black Mountain Coal Co. has been chartered in Bristol, Va., capital stock \$100,000; president, John H. Caldwell; vice-president and treasurer, Samuel L. King. The company is to operate in coal, coke, oil, petroleum, iron ore, etc.

The Virginia Iron, Coal & Coke Co. is working day and night, pushing to completion its Bristol furnace. Work was begun Saturday on the fourth stove. Its stockhouse is to be doubled in size at once. The hearth and bottom jackets have been placed under the stack, and



these jackets alone remain to be relined with fireproof brick. Two 250-horsepower Cahall steam boilers will be added as soon as they can be made and shipped to Bristol. Tons upon tons of iron ore have been placed in the stockhouse, which has been floored with iron instead of wood.

### TEXAS' OIL FIELDS.

#### Rapid Development of the Industry at Corsicana.

[Special Cor. Manufacturers' Record.]  
Corsicana, Texas, August 26.

In May, 1894, while an artesian water well was being drilled for the Water Development Co. of this city, petroleum oil was found at a depth of 1040 feet. This oil was cased off, but still continued to come out at the rate of about two barrels daily.

Mr. Jack Davidson, one of the drillers, had operated in the Pennsylvania oil fields, and, realizing the situation, formed a partnership with Messrs. H. G. Damon and Ralph Beaton and went to work securing leases. After securing leases on about 40,000 acres of land, Messrs. Guffey & Galey, well-known developers in the Pennsylvania field, were induced to visit this place, and agreed that for half-interest in the leases they would furnish the money to put in fine wells. The first was a five-barrel well; the second a "duster." It was decided to go a quarter of a mile east, where their efforts were successful in securing a 15-barrel well. This well, coming in in June, 1896, in still a good producer. This stimulated others to enter the field, and two or three local companies were organized and commenced the development.

In January, 1897, Mr. W. J. Lecky of Oil City, Pa., an oil expert, came here and spent nine months investigating this field. About October 1 oil was becoming an elephant on the hands of the developers. It was "oil, oil everywhere, and no place to put it." Mr. Lecky left and Mr. J. S. Culliman of Washington, Pa., came upon the scene and contracted with the local companies to take 100,000 barrels of oil at fifty cents per barrel. Mr. Culliman commenced the erection of large storage tanks and a pipe line, and the oil accumulated so fast it took good management to take care of it. About this time the Southern Oil Co. was organized and bought out the interests of Messrs. Guffey & Galey.

A refinery became a necessity, and during last year a refinery with 1000 barrels daily capacity was built by Messrs. J. S. Culliman & Co., and is now supplying Texas, Indian Territory and other regions with refined oil. About 75,000 barrels of crude petroleum is produced here monthly from about 390 wells, and brings seventy-five cents per barrel at wells, this number being increased almost daily. Early last spring a St. Louis syndicate purchased the interest of the Southern Oil Co. for \$250,000, and also several smaller interests, giving them nearly 100 producing wells.

Mr. J. S. Culliman and associates have purchased the old water-works property, comprising about 900 acres, and will develop same. This is considered choice territory.

One of the largest oil companies yet organized here will perhaps be chartered in next two weeks.

A very important feature in this oil discovery here is the heavy natural gas wells being secured, which gives Corsicana the cheapest fuel of any city in the South or West. The McKie well, six miles from the city, has force enough to throw water to a height of about 100 feet, and when lighted illumines the whole country for miles around. This

natural gas is being used by some of our steam plants, all others using the residuum from the petroleum.

The refinery plant is being very much enlarged now.

It is reported that Dr. S. W. Johnson and Ralph Beaton will soon erect on the corner of West Fourth avenue and North Eleventh street a three-story apartment building to cost about \$15,000.

Carpenters and plumbers are in great demand here. They can't be secured in the State, as contractors have failed through the leading dailies of the State to secure them.

Our Commercial Club will make it very interesting to some who will join them in the building of a cotton mill here.

The street railway to have been built by W. M. Bright & Co. is in very unsatisfactory condition. About 600 feet are graded and tied, and Mr. Bright says he has been waiting for rails, etc., for past month.

S. W. BOGY.

### Busy Times at Paducah.

[Special Cor. Manufacturers' Record.]  
Paducah, Ky., August 28.

Business at Paducah has never been livelier than at present. All our factories are running on rush orders, and many of them overtime. J. L. Kilgore & Co. and T. C. Seaman & Son, both heading manufacturers, are making large additions. The Lack Singletree Co. will also add twenty men on September 1. The canning factory built this spring is employing 150 persons, and will have a most successful season. The E. Rehkoph Saddle Co. and the Jackson Machine Shop are largely increasing their capacity.

The Illinois Central Railroad is building eight miles of additional sidetracks, a new dispatcher's office, a new roundhouse of forty stalls, and all indications point to the construction of a new union depot at a cost of \$100,000.

The marine ways have more work than can be handled. Two large boats are now being built here; in fact, all the marine ways on the Ohio and Mississippi are busier than ever known before.

More residences and business houses are being erected and projected than at any one time before; in fact, the prosperity of Paducah is greater than ever known before.

### North Carolina Granite.

[Special Cor. Manufacturers' Record.]  
Faith, N. C., August 28.

Granite works here are in full blast, but many are being turned down because of a lack of hands to do the work. Chapel Hill, Durham, Charlotte and Raleigh are buying granite for public improvements. The money coming in is mostly being used in building stone houses and churches.

### Wants American Pig Iron, Phosphate, Etc.

THEODORE M. STEPHAN,  
Georgstrasse 12,  
Bremen, Germany.

August 14, 1899.

#### Editor Manufacturers' Record:

I am interested in many lines of American articles, manufactures, such as machinery, as well as raw materials (pig iron, phosphate rock), not excluding animal foodstuffs (oilcake, etc.) There is a wide market here for any of these articles, though many of our American manufactures may already be represented. Every year adds 800,000 lives to the consumers' list and several millions of domestic animals that must be fed and fattened. And no matter how much phosphate and furnace slag, etc., are annually added to the soil, the latter cannot produce the necessary supply. And so it is with pig iron; the demand far exceeds the

supply. The pig-iron syndicate has exhausted its available stock till July, 1900, and the works are running dreadfully behind for want of pig iron. If I had prices, analyses and samples I could sell thousands of tons most every day; 14,000 tons Nos. 2 and 3 soft and basic are now being shipped to this port, selling at marks 86, 89 and 90, delivered, duty included, but 14,000 tons cannot fill the gap.

If you can bring me in connection with the proper parties in this line I would appreciate it highly. And the same I would like to apply to cottonseed oil and cake and phosphates.

Trusting that I am not imposing too much on your good nature, and hoping to again hear from you, I beg to be, gentlemen, most truly yours,

THEO. M. STEPHAN.

### American Bolts and Nuts Wanted.

DAVID BODDEN & CO.,  
Importers, Indenters and General Commission Merchants,  
Iron, Metal and Machinery Merchants.

81 St. George's Place,  
Glasgow, August 15, 1899.

#### Editor Manufacturers' Record:

We will be very pleased if you can introduce us to any good firm who make bolts and nuts, and who would be in the position to compete for orders on this side. We are anxious to represent as agents for a good firm producing these articles; also any specialty. Trusting you may be able to assist us,

Yours faithfully,

DAVID BODDEN & CO.

### The Benefit of Publicity Through the Manufacturers' Record.

West Union, S. C., August 16.

#### Editor Manufacturers' Record:

It gives me pleasure to state that the building of a flouring mill, as contemplated by Messrs. Burns & Strother last spring, and about which you kindly published notice thereof in the Manufacturers' Record, has already been constructed. Since the 25th of July the mill has been in full operation, doing a custom work with the most gratifying results, both to the owners and customers. A voluminous correspondence was evoked in response to the mention given the firm in your paper, which enabled us to secure the most favorable terms that money could command on the market. Our orders for machinery and supplies for our establishment were awarded Messrs. Munson Bros. & Co. of Utica, N. Y., Messrs. Norrish, Burnham & Co. of Glen Rock, Pa., and Messrs. S. Morgan Smith Co. of York, Pa., and we are satisfied that our entire outfit is as fine as the best made anywhere in the country. It shall always be a pleasure for me to give due credit to the Manufacturers' Record for the valuable assistance rendered us in placing our orders.

I sincerely trust that you may meet with unbounded success in the field of financial and industrial journalism that your merit so richly deserves, for I believe much of the present industrial development everywhere alive in the South is largely due to the friendly attitude of the Manufacturers' Record in directing unemployed capital of other sections to the resources of our Southland and bespeaking for it that fostering care of the State that would afford protection and security to invested capital against the waning influence of demagogic political quacks to array labor against capital that were during the financial depression in the early part of this decade existing in the country.

With the kindest regards, I am,

Sincerely yours,

C. R. D. BURNS.

### The South a Pioneer.

The Dry Goods Economist of New York advises its readers to keep their eyes on the South, and says: "The progressive methods which have marked textile manufacturing in the South, and which in a little over ten years have rendered possible the production of fine grade cottons in place of the coarse, cheap fabrics which formerly comprised the entire output of Southern mills, are destined within a comparatively brief time to work a remarkable change in a large section of the dry-goods industry. Southern manufacturers are not satisfied with having 'their cotton in the back yard and their coal in the cellar,' as the phrase goes; they are determined to sell their product direct to the retailer, not merely in the shape of piece goods, but in the form of garments. There will thus be effected many savings in the cost of production and distribution of many lines, especially overalls, 'pants,' the cheaper grades of colored shirts, etc."

### Food Products in Germany.

Mr. Carl Simon, the Roumanian consul-general in Germany, who ranks high as an economist, has written a book showing the effect of the import of agricultural products from the United States upon agriculture in Germany. He says that American products compete severely with those of native growth, the competition not being confined to cereals alone, but extending also to all kinds of agricultural implements, and he says that the advantage America has over other producing countries is that its method of production and commercial handling are not primitive, but are perfect.

September is the month for fishing and outdoor sports, and is the beginning of the hunting season in Canada and in Maine. Scribner's for September has a number of articles with an outdoor flavor to them. It opens with an account by Frederic Ireland of what he calls "the finest canoeing country in the world." He made a 500-mile journey from Mattawa to the headwaters of the Ottawa and Gatineau rivers, through a region abounding in fish and moose. It has been for centuries and is now the home of the Algonquin Indian. The illustrations are made from the author's abundant photographs.

Cassier's Magazine for August contains 292 pages of reading, including more than 200 engravings, illustrating eighteen articles prepared by leading authorities dealing with the adaptation of electrical discoveries to practical affairs. The issue is in reality a valuable reference-book on the subject of electrical development during the last quarter of a century.

The old Dismal Swamp canal, twenty-two miles long, from Deep Creek, Va., to South Mills, N. C., rehabilitated by the Lake Drummond Canal & Water Co., in which Baltimoreans are largely interested, is, it is announced, open for business.

On one day last week two cotton-mill companies, a cotton mill and ginners, a hardwood company, two telephone companies and a hardware company, the capital stock of which aggregated more than \$500,000, were chartered in Mississippi.

A dispatch from Wheeling states that 400 acres of land in the Parkersburg oil field, first developed by Samuel Galey about two years ago, and sold to R. P. Hue for \$70,000, has been sold to the Allegheny Oil Co. for \$150,000.

It is reported that Owensboro (Ky.) and other Southern capitalists will organize a \$150,000 cotton-factory company.

[A complete building in the construction]

### POINTS

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## RAILROAD NEWS.

[A complete record of all new railroad building in the South will be found in the Construction Department.]

## POINTING TO PITTSBURG.

Seaboard Air Line and West Virginia Central May Co-operate.

Mr. Benjamin A. Richmond of Cumberland, Md., who has been conferring in New York with representatives of the West Virginia Central & Pittsburgh Railway Co., is quoted to the effect that a deal is pending between representatives of the West Virginia Central and the Seaboard Air Line companies, involving the building of a connecting link by the West Virginia Central to meet an extension of the Chesapeake & Ohio Railway along the Greenbrier river and the building of a line through Eastern West Virginia and Virginia to deep water near the Chesapeake bay. It will be remembered that a few years ago there was projected a line known as the Chesapeake & Western Railroad, to run from the West Virginia coal fields to deep water in Eastern Virginia. A portion of the road was built from Elkton, on the Shenandoah Valley division of the Norfolk & Western Railway, in Rockingham county, Virginia, to Bridgewater, in the western part of the county, about twenty-seven miles. This road was to extend through a gap in the Blue Ridge to Orange, Va., where connection would be made with the narrow-gauge road running from Orange to Fredericksburg, which was to be changed to standard gauge, and from Fredericksburg construction was to be made to a point on the Potomac river opposite Pope's Creek, Md. For several weeks there have been rumors at Harrisonburg of the revival of the plans to extend the Chesapeake & Western Railroad in both directions through Highland county, Virginia, or Pendleton county, West Virginia, and on to a junction with the West Virginia Central. It is not unlikely that the basis for the rumor was the plan now contemplated, which does not necessarily imply physical union of the Seaboard Air Line and the West Virginia Central & Pittsburgh, but which would, if consummated, mean another outlet, and by a Virginia port, for the coal along the former road, indications of the greater development of which are had in the proposed union of the Davis Coal & Coke Co. and the railroad company, and would give the Seaboard Air Line, by other connections in Eastern Virginia, direct route to Pittsburgh and the West.

A dispatch from Richmond, Va., says that the statement "of the prospective consolidation of railroad interests between the West Virginia Central and persons representing the Seaboard Air Line is denied by President John S. Williams of the latter line."

## NET EARNINGS INCREASE.

Gratifying Results of Revived Railway Activity.

A recent compilation by the Commercial and Financial Chronicle of New York of the gross earnings of the railroads of the United States for the six months of the current year was a gratifying exhibit of increasing strength in that direction. In its last issue it presents the figures of the net earnings, which indicate an equally healthy condition. The gross earnings of 172 roads, with a mileage of 143,862, and increase of 960, were \$520,558,717, an increase of \$31,782,631, or 6.50 per cent.; the operating expenses were \$364,752,688, an increase of \$20,539,839, or 5.97 per cent., and the net earnings \$155,806,029, an increase of \$11,242,792, or 7.78

per cent. Twenty-one roads of the Southwestern group show an increase in net earnings of \$2,265,548, or 20.83 per cent., and thirty-five lines of the Southern group an increase of \$1,258,425, or 8.76 per cent. Particular roads in which the South is interested make the following exhibit in the increase in net earnings for six months: Louisville & Nashville, \$593,296; Southern, \$393,499; St. Louis Southwestern, \$375,288; Norfolk & Western, \$345,961; Missouri, Kansas & Texas, \$126,489. In net earnings the Pennsylvania system leads, with \$3,346,300. The improvement, which has been general and widespread, is correctly attributed by the Chronicle to the revival of trade.

## To Develop Lumber.

Mr. P. Matthew, engineer of the Atlantic Coast Lumber Co. of Georgetown, S. C., in a letter to the Manufacturers' Record telling of the completion of a preliminary survey for the company's railroad from Georgetown to Marion, S. C., writes that although the whole road has not been definitely located, it is more than likely that part of it will follow the line of the old Georgetown & North Carolina Railroad, which was graded before the war. The part nearest Georgetown is in course of construction, and the rails have been laid for a considerable distance. Mr. Matthew adds: "The vast improvements of the Atlantic Coast Lumber Co. at Georgetown have commenced. They include the building of saw mills with capacity of from 300,000 to 400,000 feet a day, a wharf 1600x64 feet on Sampit river, a large hotel, new office buildings, stores, warehouses and a great number of dwellings, about twenty having already been finished. W. T. Sears is superintendent."

Mr. Lewis A. Hall is president, and Mr. E. B. Freeman is vice-president and general manager of the Atlantic Coast Lumber Co.

## To Build 210 Miles.

The projectors of the Chattanooga, Augusta & Charleston Air Line Company filed a petition for incorporation at Atlanta, Ga. The petitioners are Thomas W. Alexander, Boykin Wright, F. E. Fleming, J. D. Dawson, Paul Mustin, Charles S. Heard and James U. Jackson of Augusta, S. W. Travers and Edmund Randolph Williams of Richmond, Va.; A. H. Hodgson of Athens, Ga.; Goodwyn Rhett, George W. Williams, Jr., C. Wulburn and W. B. Chisolm of Charleston, S. C.; Joseph M. Brown and J. J. Spalding of Atlanta. The line, it is estimated, will be 210 miles long, to run in a general northwesterly direction through the State from Augusta by way of Athens to reach Chattanooga, Tenn. The capital stock is to be \$500,000, and the principal offices are to be at Athens. This is the road which it is expected will make connection with an extension of the Seaboard Air Line from Charleston to Augusta, the survey of which has already been made.

## The Tennessee Central.

Rail laying on the Tennessee Central Railway has begun at Rockwood, Tenn., and it is said that sufficient rails are on hand to build forty miles from Rockwood to Crossville. Between 1500 and 2000 men are at work upon the line, and grading has been completed between Emory Gap and the long tunnel, a few miles from Rockwood, where a big force of men are at work.

## Increasing Rolling Stock.

Among orders reported for additions to the rolling stock of Southern roads are 1000 box cars of 60,000 pounds capacity

for the Southern Railway, four 10-wheel locomotives for the Louisville & Nashville Railroad, two 10-wheel locomotives of 140,000 pounds weight for the Richmond, Fredericksburg & Potomac Railroad, and two engines for the Florida East Coast Railway.

## Railroad Notes.

The freight business of the Chesapeake & Ohio Railway at present is stated to be surprisingly large.

The Atlanta Railway & Power Co. has decided to increase by 20 per cent. the wages of conductors and motormen in its employ.

Baltimore & Ohio conductors and engineers are to be provided with annual passes for themselves, their wives and young children.

It is expected that trains on the Middle Tennessee & Alabama Railroad, now under construction, will be run to Decatur, Ala., by January 1.

The St. Louis Electric Railway Co., known as the Suburban, has passed by purchase into the hands of the Belleville & St. Louis Electric Railway Co.

Mr. W. C. Connor of the Dallas, Fort Worth & Gulf Railroad has no doubt that the construction of the road between Dallas and Fort Worth will begin within a month.

Stockholders of the Chesapeake & Ohio Railway will vote in October on a question of issuing not more than \$3,000,000 bonds for the Greenbrier extension of the railway in West Virginia.

It is expected that the Missouri Midland Railroad, between Columbia and McBaine, Mo., where it connects with the Missouri, Kansas & Texas Railway, will be in operation this week.

It is announced that Henry Wood, at present general manager of the Choctaw, Oklahoma & Gulf Railroad, will succeed Rudolph Fink as general manager of the Choctaw & Memphis Railroad.

About 2000 men will in a few days be at work all along the line of the Little Rock & Hot Springs Western Railroad, and a through-train service is expected to be instituted by December 1.

Mr. S. F. B. Morse has been promoted from general passenger and ticket agent at New Orleans of the Southern Pacific Company to passenger traffic manager of the Atlantic division of the system.

It is stated that the Birmingham (Ala.) Board of Trade will lead in a movement for the abolition of the present railroad commission of the State, and for the selection of a new one by popular election.

The assessed valuation of railroads in West Virginia is \$29,618,014. Included in this are the coal and lumber roads and small local lines valued at \$9,132,150, and the street-car lines, valued at \$563,912.

It is believed at Louisville that within the next year a considerable part of the Louisville & Nashville Railroad between Louisville and Nashville and between Memphis Junction and Memphis will have been double-tracked.

The street-railway lines of the Columbia Electric Street Railway, Light & Power Co., purchased last week by a syndicate headed by Mr. W. B. Smith Whaley, will be operated ultimately from the central power-house of the Columbia Water Power Co.

One of the latest railroad rumors, so plentiful at this season, is that a New York syndicate will endeavor to secure the Western Maryland Railroad property by purchasing the city of Baltimore's interest in it for the further development of the road.

Two companies are in the field to se-

cure from the Richmond (Va.) city council the franchise to operate the lines of the Richmond Railway & Electric Co. One is known as the Boyd-Newton syndicate, and the other is headed by Mr. John C. Robertson.

It is rumored that the Illinois Central Railroad Co. may gain control of the Minneapolis & St. Louis Railroad, which, by the construction of a few miles of road between Lynn and Albert Lea, Minn., would give practically a through line from Duluth to the Gulf of Mexico.

Citizens of Florence, S. C., believe that with the completion of the Atlantic Coast Line's new road from Denmark to Robbins and the recent acquisition by the road of a half-interest in the lease of the Georgia Railroad, that trains on the road will soon be running between Florence and Atlanta.

The Atlantic Coast Line Terminal Co. has been incorporated at Augusta, Ga., by Henry Walters, B. H. Newcomer, W. G. Elliott, W. J. Craig and J. R. Lamar. The incorporation is regarded in Augusta as a certain indication of the building of a terminal passenger station by the Atlantic Coast Line at Augusta.

A plan is being discussed whereby the new Richmond, Petersburg & Carolina Railroad, instead of building its link through the city of Richmond to the Richmond, Fredericksburg & Potomac Railroad tracks, may use the Chesapeake & Ohio tracks from Richmond to Hanover Junction, and there tap the Richmond, Fredericksburg & Potomac.

Surveys have been completed for an extension of the Savannah, Thunderbolt & Isle of Hope Railway from Savannah to Warsaw Island, eleven and one-half miles. The cost will be \$119,765.50. Besides this, there will be the cost of electric equipment, including an additional electric plant at the Isle of Hope or Warsaw, bringing up the total cost to \$150,000 or \$175,000.

Local capital has been subscribed for preliminary work on the construction of a standard-gauge electric railroad from Owensboro to Calhoun, Ky., by the Owensboro & Calhoun Interurban Railway Co., of which Mr. J. H. Hickman is president and J. D. Fredd is general manager. The road will carry passengers and freight, and work upon it is expected to begin about October 1.

A feature of the Paris Exposition next year will be, it is said, a log cabin 20x90 feet, built by the Southern Railway of wood taken from the sections of the South touched by the road. The exterior will be of pine logs, and different woods will be used to finish the interior, while the two chimneys will be built of forty different varieties of rock obtained from points along the road.

One of the latest additions to American trade publications is the Architects and Builders' Journal of Baltimore, a monthly newspaper devoted to the interests of architecture, building and real estate. It is issued by the Globe Publishing & Printing Co., under the editorship of Mr. Wells J. Hawks. The first number is an evidence of the newspaper ability of its editor, and of the value of the publication, which begins its career under the favorable auspices of a revival of building and the trades connected therewith.

The Cornucopia or Southern Horn of Plenty, edited with wonderful enterprise and vigor by A. Jeffers at Norfolk, Va., has entered upon its fifteenth year. This monthly is devoted to the exploitation of the Norfolk neighborhood as a home for manufacturers and farmers, and Mr. Jeffers' efforts have been crowned with signal success.



## COMMERCE.

This department is devoted to a record of the rapidly developing commerce of Southern ports.

### FOR FOREIGN TRADE.

#### Exhibitors at the National Export Exposition.

Among the leading business firms of the country who have already arranged to take advantage of the National Export Exposition at Philadelphia for advertising their business are the following firms, well known to readers of the Manufacturers' Record:

From Philadelphia—Link-Belt Engineering Co., machinery models; Otto Gas Engine Works, gas engines; William S. Haines Co., steam specialties; Harrison Safety Boiler Works, boilers; Henry G. Morris, sugar machinery; R. D. Wood & Co., iron castings; G. & H. Barnet Co., files; Frank Toomey, steam engines; John T. Bailey & Co., bags, rope and twine; J. E. Rhoads & Sons, electric belting and accessories; Merchant & Co., Inc., metal tiles, shingles, brass, copper tubes, etc.; Burnham, Williams & Co., locomotives; Keystone Lubricating Co., lubricating grease; Gara, McGinley & Co., cornices, etc.; J. W. Moyer, conveying machinery; Harrisburg Foundry and Machine Works, engines.

From Pittsburg, Pa.—Jones & Laughlin, Ltd., steel shaftings and railroad supplies; Standard Manufacturing Co., enamel bathtubs and enamel plumbing goods.

From York, Pa.—A. B. Farquhar Co., Ltd., agricultural implements and machinery; S. Morgan Smith, turbine wheels.

Other Pennsylvania Cities—The Vulcan Works, Chester, machinery; Frick Company, Waynesboro, ice and refrigerating machinery; Slatington and Bangor Slate Syndicate, Slatington, slate products; Sprout, Waldron & Co., Muncy, grain mills.

From Troy, N. Y.—The Covert Manufacturing Co., saddlery and hardware; Ludlow Valve Manufacturing Co., valves.

From Springfield, Ohio—James Leffel & Co., water wheels and Leffel's automatic steam engines.

Elsewhere in Ohio—Standard Tool Co., Cleveland, twist drills, etc.; Stilwell-Bierce & Smith-Vaile Co., Dayton, machinery; E. D. Albro Co., Cincinnati, veneers and wood; Kilbourne & Jacobs Manufacturing Co., Columbus, railway and mine supplies and earth and moving tools.

In Other States—Charles A. Schieren & Co., New York city, leather belting; A. O. Norton, Boston, Mass., lifting jacks; Norton Emery Wheel Co., Worcester, Mass., grinding machinery; Chas. Kaestner & Co., Chicago, Ill., ice-making, refrigerating and brewing machinery; Joseph Dixon Crucible Co., Jersey City, N. J., graphite; Remington Machine Co., Wilmington, Del., ice machinery; Mayo Knitting Machine & Needle Co., Franklin, N. H., automatic knitting machine.

#### Bright for Galveston.

Mr. C. P. Huntington is a man of few words. When he speaks he means what he says. Citizens of Galveston are, therefore, deriving much satisfaction from the report by President Daniel B. Henderson of the Galveston & Western Railway that Mr. Huntington said to him the other day, "if money can do it, I am going to make Galveston the finest shipping port in the United States." Mr. Henderson added: "The purchase by Mr. Huntington of water frontage here and its becoming known in New York that Galves-

ton is to become practically the eastern terminus for the great Southern Pacific system has awakened a wonderful interest in the town among many people. No one can talk with Mr. Huntington on the subject of Galveston without at once being impressed with the idea of his enthusiasm and impatience to get to work here. He will be here, he says, in October, and will take a hand in the work of improving his property in person. He is the youngest man today connected with the Southern Pacific Company, and is as capable of manipulating a spade or pile-driver as he is in holding up his end in a trade. He proposes to give Galveston the finest shipping facilities that money and engineering skill can obtain, and his coming to Galveston and looking after this enterprise in person means more for the future of the town than most people have any idea of. The people of this city and this State should give him a warm reception when he comes."

#### Reaching Out Abroad.

In acknowledging an invitation to attend the industrial convention at Huntsville, Ala., in October, United States Senator John T. Morgan has written to Secretary N. F. Thompson of the Chamber of Commerce as follows:

"The foreign markets are those we must reach out for if we would enjoy the full measure of our advantages. Toward the promotion of this policy nothing can be of greater advantage than a ship canal through the Isthmus of Darien, and that is now secured. I speak with firm confidence in this great fact as an achievement that is accomplished in the secure foundations that have been laid and only awaits, for a short period, its completion. A cotton port at Manila that will enable us to reach the Orient with our cotton and cotton goods and our provisions and supplies without the famous expenditures we are making and have so long endured in the tribute to Liverpool as our point of distribution to Asiatic consumers must be a great factor in the progress of American productions and manufacturers.

"The example of the wonderful growth of Hong Kong until it is the third, if not the second, seaport in the world is a demonstration of what we can do in the Asiatic trade if we avail ourselves of advantages that have come to us even without seeking them."

#### Jottings at the Ports.

It is announced that the first steamship of the new Mobile-New York Line, the Catania, will sail for New York from Mobile on September 8.

It is reported that the Chesapeake & Ohio Steamship Co. will put two more big ships on its lines between Newport News and England about the middle of September.

In the cargoes of the steamship Flandria and Widrington, of the Mobile Steamship Line, which left Mobile last week for Cuban ports, were thirty-three carloads of packing-house products.

Representatives of the Board of Trade of New Orleans who have visited the grain-producing States of the West find 2,500,000,000 bushels of corn in sight and an enormous yield of wheat and oats, much of which is expected to be handled for export by New Orleans.

The National Association of Manufacturers has purchased at Shanghai, China, a building with 40,000 square feet of floor room for a permanent exhibit of American industry. Among the one hundred big firms which have asked for space are the Carnegie Steel Co., the Baldwin Locomotive Works and the Phoenix Bridge Co.

## TEXTILES.

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the Manufacturers' Record. We shall be glad to have such matter at all times, and also to have any general discussion relating to cotton matters.

#### Proposed 50,000-Spindle Mill.

It is proposed to build at Gastonia, N. C., a factory in which will be placed from 25,000 to 50,000 spindles and 1200 to 2500 looms for the production of cotton goods for export trade, a line for which the local supply of cotton can be well utilized. This plant is contemplated by Mr. George A. Gray in conjunction with Mr. John F. Love. Both projectors are manufacturers of long experience, Mr. Gray having been in cotton milling for forty-eight years. Mr. Gray is president and manager, and Mr. Love, treasurer, of three mills at Gastonia, and several mills have been located and equipped under Mr. Gray's direction.

#### Another Mill at Columbia, S. C.

A company has been organized, with capital stock of \$100,000, to build at Columbia, S. C., a mill to manufacture coarse goods for export trade from the waste of other mills. The main building will be two stories high, and the equipment will be 5000 spindles and 180 looms. Site for the plant has been purchased, and the work of erection will be commenced in a few weeks. Messrs. W. B. Smith Whaley & Co. are preparing the plans and specifications for this enterprise, and they state that no name will be selected for it or charter asked until it is completed.

#### A 5000-Spindle Duck Mill.

The Hogansville Manufacturing Co. of Hogansville, Ga., mentioned last week as incorporated, has formally organized and elected Mr. Judson F. Mobley secretary-treasurer. The company intends to build a mill to be equipped for the manufacture of cotton duck, the instalment to be 5000 spindles and complement. Contracts for buildings will be awarded next week, and estimates on machinery are now being received. The capital stock is \$75,000.

#### Wants to Remove South.

Mr. James E. Rigg of 224 Wister street, Germantown, Philadelphia, Pa., writes the Manufacturers' Record that he has a woolen and cotton-goods mill that he is desirous of removing to some Southern location. The plant contains 100 looms, with complement of carding, spinning, finishing and dyeing, all ready for immediate operation. Any Southern community desiring to locate this enterprise in its midst is invited to correspond.

#### Textile Notes.

There is talk of forming a cotton-factory company at Millen, Ga. The mayor is interested.

Messrs. L. M. Gates and J. C. Hayes of Smith Station, Ala., are endeavoring to form a cotton-factory company.

A charter has been granted to the Berkeley (Va.) Knitting Mills, with capital stock of not less than \$5000 nor more than \$25,000.

The Manetta Mills of Lando, S. C., will increase its capital stock from \$40,000 to \$100,000. Company is now operating 5000 spindles.

The Norwood (N. C.) Cotton Mills will double its capacity, the enlargement to

be contracted for soon. The company is now running 5000 spindles.

The American Cotton Spinning Co. of Denison, Texas, has been incorporated, with capital stock of \$100,000, by Messrs. J. A. Smith, Hiram Brooks and B. M. Seward.

The McDonald Cotton Mills of Sylacauga, Ala., has been formed and purchased twenty-five acres of land to be used as site for the erection of a 10,000-spindle cotton mill.

The Darlington (S. C.) Manufacturing Co. contemplates increasing its plant. The directors are considering an instalment of 6000 more spindles, which would make 11,000 in all.

The movement at Hammond, La., for the erection of a cotton mill is progressing, and a committee on organization, plans, etc., has been appointed, of which Mr. C. E. Cate is chairman.

The general manager of the Richmond Hosiery Mills of Rossville, Ga., states regarding the reported enlargement of his plant that no steps towards that end will be taken until after November 1.

A \$75,000 company will be formed at Jackson, Tenn., to erect a cotton factory. Capt. Thomas Tate, the promoter of the enterprise, has secured estimates on a 3000-spindle and 200-loom plant.

A movement is on foot at Savannah, Ga., to reorganize and put in operation the Savannah Cotton Mills, which has an equipment of 7500 spindles and forty-one cards. Horace A. Crane is interested.

The cotton-mill project for Wyeth City, Ala., mentioned last week, is projected by Dr. J. A. Wyeth, and Mr. J. A. McKinstry is acting for him in securing full information, catalogues, estimates, etc.

Messrs. J. W. Cabaniss, Samuel Mayer, N. M. Block, Henry J. Lamar and Geo. L. Snowden of Savannah, Ga., have incorporated the Ocmulgee Cotton Mills, with capital stock of \$100,000, to build and operate a cotton factory.

Messrs. B. Frank Mebane, F. L. Fuller and W. R. Walker of Spray, N. C., have incorporated the American Development Co. for the erection of a cotton mill; capital stock is placed at \$100,000 and privileged to increase to \$1,000,000.

The Anniston (Ala.) Carpet Co. will erect a 200-foot addition to its present 100-foot building; considerable machinery will be purchased as soon as the structure is completed. Spinning, carding, weaving and dyeing machinery will be installed.

The J. H. Waters Co. of Sellersburg, Ind., wants estimates on twenty-five machines for knitting, together with all auxiliary apparatus, including loopers, topers, press, boards, shafting, belting, pulleys, etc.; in fact, everything except power.

The new Strickland Cotton Mills of Valdosta, Ga., recently reported at length, has resolved to increase its capital stock \$25,000, making it \$175,000 in all. Besides the 10,000 spindles heretofore reported, it is also intended that 325 looms be installed.

A movement for a cotton factory is on foot at Norwood, La., a \$50,000 company to be organized to build it. Those interested are Messrs. J. A. Redhead of Centerville, Miss.; Dr. L. G. Perkins, Dr. A. Gayden, J. D. Norwood, H. S. Perkins, M. C. Bridge and W. A. West.

Under the auspices of the Chamber of Commerce subscriptions are being obtained for the People's Cotton Mill of Huntsville, Ala., a co-operative concern to have a capital stock of \$100,000, divided into 1000 shares, each holder being limited to not more than twenty shares.

The Commercial and Industrial Club,

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J. M. Brooks, secretary, of Evergreen, Ala., is desirous of interesting capital in the proposed cotton factory to be built. Inducements of a water-power site and other facilities are in prospect. Practical millmen are especially invited to investigate.

The Jefferson (Ga.) Cotton Mills, which were incorporated recently, organized by electing H. W. Bell, president; J. C. Turner, vice-president and manager; Frank Roberts, secretary-treasurer. The capital stock of \$60,000 has been subscribed, and contracts for building and machinery will be arranged soon.

The Newnan (Ga.) Cotton Mills has had plans prepared for a large addition to accommodate 3500 additional spindles; the mill has now 6300. The factory extension will be two stories high, 50x85 feet in size. There will also be erected a warehouse for capacity of 1200 bales of cotton, two stories high, 60x100 feet.

The Edgefield (S. C.) Manufacturing Co. is adding new machinery, as reported last week. The fifty looms just added gives the company 212 in all, with 5000 spindles, and fills the present building. Within the next year the company hopes to increase the size of building sufficiently to accommodate a duplicate of the present equipment.

The Ashcraft Cotton Mills, recently organized at Florence, Ala., to build a 2000-spindle and 80-loom mill, has enlarged its original intentions. It is now proposed that an equipment of 3000 spindles and 100 looms be installed. The erection of the buildings will be the work of day labor under the direction of President Cyrus W. Ashcraft.

A \$100,000 stock company is being organized at Kosciusko, Miss., for the erection of a cotton factory. Those interested include the president, C. C. Kelly; vice-president, F. Z. Jackson; secretary-treasurer, Walter Burgess, and the directors, Messrs. Kelly, Jackson and Burgess, W. B. Potts, A. E. Kelly, N. O. Thompson and J. A. Gilliland.

The Park Woolen Mills of Rossville, Ga., will improve their plant, erecting new buildings, putting in new machinery, etc. About \$6000 worth of new machinery has already been bought. This will include carding machines and looms, to be delivered in September. A large brick addition will be erected at once, together with several smaller additions, warehouses, etc. The capacity will be about doubled.

Mr. J. F. Kerner of Kernersville, N. C., states that his proposed knitting mill, mentioned last week, is assured. The company has organized, with a capital stock of \$10,500, Virginia parties being interested, and a building 40x80 feet, three stories high, has been secured, with boiler and engine-room and dyehouse attached. Equipment of machinery will be installed at once, to employ twenty-five hands.

The Cedartown Cotton Co. of Cedartown Ga. (the corporation formed by a combination of four companies, not mills, as was stated last week), embraces the Cedartown Cotton Manufacturing Co., the Paragon Mills, the Cedartown Warehousing Co. and the Cedartown Cotton Gin. It will issue bonds for various improvements. Order has been placed for machinery to fill the Paragon Mills, making the total of spindles 12,500; the capacity will then be from 80,000 to 90,000 pounds of yarn per week. After this machinery is placed it is the intention to extend the present main building to accommodate 9000 more spindles. Philadelphia (Pa.) parties will build a 10,000-spindle mill in Cedartown at a cost of about \$150,000, and have arranged for its lease to the Cedartown Cotton Co.

## COTTONSEED OIL.

This department is open for the full and free discussion of trade topics and practical questions, and contributions are invited from men who are identified with this industry. Items of news are always acceptable.

### The Market for Cottonseed Products.

New York, N. Y., August 30.

The market has been fairly active during the week, but at the moment dullness prevails. With regard to old-crop oil, which is gradually becoming of less importance, prices are steady to firm, according to location, while new-crop futures have been slightly reduced. Still buyers and sellers are apart in new-crop oil for September-October delivery. Exporters, almost without exception, are holding off for prices to come down to a level with those of last year before contracting. Just now producers are desirous of creating a normal relation between cost of seed and selling price of oil, a condition of affairs which exerts a certain influence on the market with regard to present prices of oil and future prices of seed. A fair demand for forward delivery prevails, but at lower prices than holders are disposed to consider. Crushers and refiners appear more willing to sell ahead, in view of the improved cotton-crop prospects, but, as already noted, buyers are considered too low in their views to produce business. Concerning the lard market prices have slightly improved, Chicago quoting for October delivery 5.55 cents. Tallow rules at 4½ cents, Chicago, with the outlook encouraging with regard to an advance. Concerning prices for future delivery of cotton oil, it is expected they will harden, although there will be but little business on this line for several weeks to come. There are reports for delivery in October or later of new-crop oil, crude, in the Southern Atlantic States at 17 cents, and a premium of 1c. is offered for any on terms for September delivery. A good demand obtains for off-grade yellow oil at 24 cents for prompt delivery, with prime summer yellow offered at 26 cents. Of the latter there is but little on offer. Europe is willing to buy off yellow and winter grades quite freely, and it would look as if prices asked will not long prove a barrier to trading, especially since quotations have been slightly reduced on all forward deliveries, or as follows: Prime yellow, 24½ cents; off yellow, 24 cents; white, 27 cents; winter yellow, 28 cents. The following are closing prices: Crude, loose f. o. b. mill, September-October, 16½ to 17½ cents; summer yellow, prime, 26 cents; summer, bleaching, 26½ cents; summer, off grades, 25 cents; yellow, butter grades, 30 cents; white, 29 to 29½ cents; winter yellow, 28½ to 29½ cents; salad oil, 30 to 31 cents. The chief demand for old-crop oil is from home consumers, although there was a fair export movement here and at New Orleans. The Western soap trade is anxious to secure new-crop crude, with refiners in same section figuring on similar lines. The market for export cake has improved decidedly. Meal is in fair demand at \$17.50 to \$18 bid f. o. b. Galveston.

### Cottonseed-Oil Notes.

Mr. J. I. McNally, formerly secretary of the Little Rock Oil & Delinting Co., has been appointed manager of the cottonseed-oil mill at Norfolk, Va., of the Fidelity International Co. of Philadelphia, which is capitalized at \$3,000,000.

Mr. L. A. Brownell, director and manager of the Holland-American Cotton Oil Co., Rotterdam, Holland, and Mr. J. G. Gash, sales manager of the American Cotton Oil Co. of New York, visited New

Orleans last week. It is stated that these gentlemen purpose to make an inspection of their interests in New Orleans, with the intention of largely increasing the production in that city and strengthening their foreign export trade in cottonseed products.

At a meeting of the Memphis Merchants' Exchange, held in that city last week, a board of arbitration was appointed to adjust differences between men engaged in the cottonseed industry. Differences which hereafter come up between the cottonseed men, including the brokers, the crushers and all others interested in the cottonseed industry, will be settled by arbitration as a result of the adoption of the rules of the exchange held at the meeting.

### GENERAL NOTES.

#### Brief Mention of Various Matters of Current Interest.

The real-estate men of Arkansas will hold a convention in Little Rock on September 21 to 23.

A Business Men's League has been organized at Lumber City, Ga. Mr. J. D. Vaughan is secretary.

During July 104 boats arrived at Williamsport, Md., on the Chesapeake & Ohio Canal, with 11,519 tons of coal.

Work has commenced on the smelter of the Southern Smelter Works at Oakdale, nine miles from Atlanta, Ga.

There is great activity in erecting new buildings and in renovating and enlarging business houses at Charleston, S. C.

The starch factory at Deland, Fla., which uses cassava, potatoes and corn, has been a success. The plant cost \$20,000.

Real estate in Columbia, S. C., to the value of \$84,900 changed hands last week, the result largely of purchases by the Seaboard Air Line.

The battleship Kearsarge, built by the Newport News Shipbuilding & Dry-Dock Co., is expected to be ready to make her trial trip within a fortnight.

United States Consul Magill at Tampico, Mexico, writes that that city has been authorized to construct a water-works system and a sewerage system.

A Richmond (Va.) shoe firm prepared for shipment this week from its Manchester factory a solid train of forty cars to go South over the Atlantic Coast Line.

The output in the Joplin (Mo.) district during the week ended August 26 was 10,294,610 pounds of zinc and 964,750 pounds of lead, valued in all at \$227,765.

A direct packet line will be established to run from Chattanooga to Riverton, where connection will be made for St. Louis and other Mississippi river points.

The Georgia & Alabama Steamboat Co., which will engage in passenger and freight traffic between Rome, Ga., and Wetumpka, Ala., has been chartered at Atlanta.

On August 1 a Lynchburg shoe firm shipped seventeen freight cars of boots and shoes destined for points in Virginia, North Carolina, South Carolina, Georgia, Alabama and Louisiana.

The Tennessee Coal, Iron & Railroad Co. has orders for future delivery of 450,000 tons of pig iron, of which 200,000 tons are for delivery in the first six months of 1900. The orders are sufficient alone to keep the furnaces in blast until April 1, 1900.

## PHOSPHATES.

### Phosphate Markets.

Office Manufacturers' Record, Baltimore, Md., August 31.

The local market for phosphate rock still continues quiet, as is the case with other fertilizer ingredients. Dealers, however, anticipate a better movement during September, and fertilizer men have been in the market during the past week, but not purchasing largely. Advances from points of production indicate a large output for the present year, and shipments for this month will be heavy. South Carolina rock is firm, with a good domestic and foreign demand. Shipments last week to coastwise ports amounted to over 4000 tons, and for the season to the 25th, inclusive, 105,703 tons, against 93,381 tons for the season of 1897-98. The shipments of phosphate rock from Florida ports continue heavy, and miners of land rock and pebble have their output well sold up into 1900. There is a heavy foreign demand for Florida rock, and values are tending higher. The activity in the Tennessee phosphate field grows more interesting as the season progresses. Large sales of phosphate land have changed hands during the past week at advanced figures. At Mt. Pleasant and other mining districts shipments continue to increase, and the domestic as well as the foreign demand is quite pronounced. Shipments of Tennessee phosphate rock from Pensacola during August will amount to over 13,000 tons, and increased shipments are expected during the autumn months should fine weather prevail at the mines.

### Fertilizer Ingredients.

The market for ammoniates is very quiet, with a downward tendency at producing centers. The Eastern demand is light, with few buyers in the market. From the South the inquiry is of an insignificant character, but later on it is expected that some business will be done. Sulphate of ammonia is steady, with stocks not excessive. Nitrate of soda is quiet and steady.

The following table represents the prices current at this date:

Sulphate of ammonia (gas).	\$3 12½ @ 3 15
Nitrate of soda.....	1 70 @ 1 72½
Blood.....	1 97½ @ 2 00
Hoof meal.....	1 70 @ 1 75
Azotine (beef).....	1 95 @ 2 00
Azotine (pork).....	1 95 @ 2 00
Tankage (concentrated).....	1 65 @ 1 67½
Tankage (6 and 20).....	1 70 @ 1 75 & 10
Tankage (7 and 30).....	17 00 @ 17 50
Fish (dry).....	20 00 @
Fish (acid).....	12 00 @

### Phosphate and Fertilizer Notes.

Ragsdale, Daly & Co., a phosphate company of Pulaski, Tenn., have leased the farms of Robert J. and J. W. McLaurin at Waco and have begun phosphate mining.

The steamship Beltisloe, 1875 tons, arrived at Beaufort, S. C., on the 18th ult. consigned to the Coosaw Mining Co., and will load a cargo of phosphate rock for a European port.

It is stated that large quantities of phosphate rock have been discovered at Cross Plains, Tenn., in paying quantities. Experts say that it will analyze from 87 to 92 per cent. pure phosphate.

The phosphate-mining industry has now opened up at Goodlettsville, Tenn. Shipments of rock have already been made by Messrs. Peay, Drake & Kemper, Cart-right Bros. and Roscoe & Clark.

It is stated that the American Agricultural Chemical Co. has absorbed the Nickerson Fertilizer Co. of Maryland, which has a capital of \$45,000 and an output of about 15,000 tons a year.

It is stated that the Virginia & Carolina Chemical Co., recent purchaser of the Darlington Phosphate Co., has de-



cided to increase the capacity of this plant and begin work very soon. Mr. C. C. McCullough has been appointed general manager.

A dispatch from Montreal states that not a single one of the Canadian phosphate mines is being worked today, and attributes the decadence largely to the working of the phosphate deposits in Florida and Carolina and the more recent finds in Middle Tennessee.

Seven deeds of phosphate lands in Sumner county, Tennessee, were registered last week, executed to the Sumner Phosphate Co., and the aggregate consideration was \$451,000. Hon. James Head is interested in two of the deals. Work of operating the mines will begin at once.

The Gulf Transit Co. of Pensacola, Fla., last week cleared the British steamship Partridge for Dunkirk with 2501 tons of Tennessee phosphate rock and other cargo; steamship Elderslie for La Palice with 3295 tons, and steamship Alicia for Liverpool with 946 long tons of phosphate rock and other cargo.

Among the recent phosphate deals at Columbia, Tenn., are the sale on the 19th ult. of 250 acres to a Virginia syndicate for \$30,000, and the sale of the Ben. S. Gary tract of eighty acres to G. M. Fogg of Nashville for \$12,000. These lands are situated on Carter's Creek pike, and contain an abundance of high-grade phosphate rock.

F. E. Clawson of Franklin, Tenn., purchased last week from Zellner & Son, near Thompson's Station, 1000 tons of phosphate rock, or the output of the mine now being worked on the Zellner farm. The rock is said to be of the highest grade, running about 80 per cent. bone phosphate, and low in aluminum and iron, making it a good export rock. It will be shipped to the European market via Pensacola, Fla.

The shipments of phosphate rock from the port of Charleston, S. C., for the week ending August 25 were as follows: For New York schooner Annie C. Grace with 751 tons, and for Baltimore the following cargoes are reported: Schooners The Josephine 950 tons, Fannie Brown 758 tons, Fannie Reiche 630 tons, John R. Bergen 1000 tons and Nellie W. Howlett 810 tons. The total domestic shipments of phosphate rock from the port of Charleston since September 1, 1898, amount to 105,763 tons, against 93,381 tons for the same period last year.

The greater portion of the thousands of manufacturers in this country are well aware of the work that has been and is constantly being accomplished for their interests by the National Association of Manufacturers. Recently Mr. W. H. Matthai of Baltimore, secretary of the National Enamelling & Stamping Co., has been appointed vice-president of the association for the State of Maryland. Manufacturers throughout the State are well acquainted with Mr. Matthai's sterling business qualities, and will be gratified to know that he has consented to act as noted.

An industrial association has been formed at Norfolk by such men as Messrs. Barton Myers, J. C. Darst, A. Jeffers and Dr. William Schmoele, to impress upon manufacturers of the United States the advantages of the Norfolk section as a site for industries. They are already in correspondence with twelve concerns, with a view to securing the removal of their plants to Norfolk.

As a result of the development of the phosphate fields it is estimated that nearly \$2,000,000 will be paid out in wages and other expenditures in Maury county, Tennessee, this year.

## LUMBER.

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

### LUMBER MARKET REVIEWS.

#### Baltimore.

Office Manufacturers' Record,  
Baltimore, Md., August 31.

Trade in all lines of the local lumber market has been of moderate volume during the past week, but the demand is generally steady from the usual sources. In the North Carolina pine industry a continuance of activity characterizes the market, and lumber seems to be moving freely at the late advance in the price-list. Kiln-dried lumber has sold in large lots during the week, and dealers here, who have milling interests in Norfolk and elsewhere in the North Carolina pine belt, have all the orders they can handle at the moment. Values are firm, and buyers pay prices readily, being anxious for prompt delivery. In rough lumber the local market is well supplied. Box boards are selling well, and values are steady. Yardmen are not purchasing heavily, but take all lots to fill immediate wants. There has been a good business in dressed lumber, and planing mills are all busy, with a fair supply of orders at good prices. The movement in white pine is moderately active, with a good inquiry for desirable lumber, of which there is a fair supply. In hardwoods receipts of inch stuff continue liberal, while thick lumber in quartered oak, ash and other woods is in light supply. Prices continue firm, with an advancing tendency, and the demand from local and out-of-town dealers is in some cases difficult to supply. Reports from milling sections in Virginia, West Virginia and Tennessee show that considerable lumber and timber is being shipped abroad. Local shippers of hardwoods report business good, with indications of better prices abroad. The London Timber Trades Journal of the 19th says: "There is no new feature to report in mahogany and hardwoods, except that the trade question of 'brokers' measure' has been finally settled, there now being one uniform system throughout the Kingdom. The market is quiet, but firm, and prices have an upward tendency. There is a good demand for mahogany, hard and fancy woods of all descriptions, but prospective supplies are likely to be limited."

#### Charleston.

[From our own Correspondent.]  
Charleston, S. C., August 28.

The volume of business in all branches of the lumber trade of this port for the present month has been very much greater than for some time past, and the prospects for a continuance of this activity is quite pronounced. At milling sections adjacent to this city there is an increased output, and a number of new plants have been established during the year. Railroads are entering new sections of virgin forest, and valuable timber lands are being opened up, all of which will improve in a great degree the lumber trade of this section. At Georgetown the situation in every branch of the lumber trade is very promising, and all the mills have a full supply of orders, while prices for all grades of lumber are firm and advancing, both for yellow pine and cypress. There is a good demand for all grades, and the inquiry from Northern ports and other sources is active. During the past week the shipments were as follows: Schooners Clara E. Bergen 342,500 feet of lumber, Edgar C. Ross 300,000 feet, George E. Dudley 341,000 feet, steamships Iroquois 38,600 feet and Algonquin 42,500 feet, all for New York.

The schooner Rebecca J. Moulton, with 390,000 feet of lumber, and steamer Navahoe, with 110,405 feet, cleared for Boston, while a number of shipments were made from Georgetown and other nearby points. Lumber freights are firm, with a scarcity of desirable tonnage. Rates to New York are reported \$5.62½ to \$5.75, Boston \$5.75 to \$6 and Baltimore \$4.50 to \$4.75. The schooner Bayard Hopkins was chartered last week to load lumber at Georgetown for Elizabethport, N. J., on private terms.

#### Savannah.

[From our own Correspondent.]  
Savannah, Ga., August 28.

A continuance of the activity in lumber circles noted a week ago has characterized the local market during the past week. The demand from Northern sources is active, and from foreign ports there is more inquiry for certain grades of lumber. The shipments of wood products from this port during the present month will reach over 10,000,000 feet of lumber and other material, and from nearby ports the activity is quite pronounced. Prices continue to show a firm front, and at interior towns advances by the association have recently been made in the general price-list. The settlement of the question of time allowed by railroads for unloading lumber was settled last week at Brunswick. A conference between lumbermen of Brunswick, Jacksonville, Savannah, New York and other points and officials of the Plant system settled upon an allowance of a ten days' limit for unloading lumber, and was mutually satisfactory to all concerned. Freight rates on lumber from this and nearby ports are firm at \$5.75 Brunswick to New York.

#### Mobile.

[From our own Correspondent.]  
Mobile, Ala., August 28.

The week under review has developed a large trade, both in timber and lumber, while the outlook is very encouraging for a good export trade during the year. The business of the port from September 1 to August 25, 1899, shows shipments of lumber amounting to 80,016,301 feet, against 50,317,522 feet. During the past week nearly 2,000,000 feet of lumber left this port for Cuba, South and Central America, Mexico and the United Kingdom. The timber trade continues to show very favorable features, shipments of sawn timber for the week being 392,761 cubic feet, and of hewn timber 27,307 cubic feet for Belfast and Greenock. Sawn timber is in good demand at 12½ to 13 cents per cubic foot, and hewn timber 13 to 13½ cents per cubic foot. Among the new charters the following are reported: Bark Mary C. Hale, 540 tons, from Mobile to New York with lumber at \$8; bark J. H. Ingersoll, 551 tons, from Apalachicola to Baltimore with lumber at \$7.75; a British schooner, 292 tons, from Apalachicola to Grenada with lumber at \$9.50, and schooner Sarah A. Fuller from Pensacola to Boston with dry cypress and yellow pine at \$9.

#### Lumber Notes.

The Koerner-Buder Lumber Co. of St. Louis, Mo., has filed a statement of increase of capital stock from \$5000 to \$20,000.

Receipts of lumber at New Orleans for the week ending the 25th ult. amounted to 1,997,000 feet, and for the season 87,960,280 feet.

Messrs. T. J. Scanlon & Co. of Middlesboro, Ky., have started a stave factory and lumber mill near Oldtown, Tenn. They have already received an order from the Standard Oil Co.

Mr. R. J. Boyd of Mecklenburg county, North Carolina, has installed a saw-mill

plant at Burgaw, with a capacity of 15,000 feet of lumber per day. He expects to begin operations in a few days.

The Leflore Lumber Co., domiciled at Clarksdale, Coahoma county, Mississippi, was incorporated last week, with a capital stock of \$76,000. The incorporators are John R. Stack, William S. King and R. B. Stack.

The Chattanooga Furniture Co. of Chattanooga, Tenn., is negotiating to acquire a plant at Alabama City, near Gadsden, Ala. It is stated that the company will probably lease the plant until its furniture factory is rebuilt.

Seven poplar logs, estimated to contain 13,000 feet of lumber, were shipped from Bristol, Va., last week to Hamburg, Germany. They were cut within three miles of Bristol, and are a fair specimen of the timber of that section.

The Merchants' Box & Crate Co. of St. Louis, Mo., was incorporated last week, with a capital stock of \$6000. The stockholders are J. Ratz, Theodore J. Kling and Edward P. Baker. The company will manufacture and sell crates and baskets.

It is stated that Mr. George N. Core of South Carolina was in Danville, Va., last week in search of a site for a shuttle factory. Mr. Core has rented the Wood & Son coal and lumber yard, and has ordered his machinery. As soon as he can get a supply of timber he will be ready to commence operations.

The saw-mill plant of the Henderson Lumber Co. at Vivian, La., near Shreveport, was destroyed by fire on the 22d ult. The mill and machinery was valued at \$8000, with insurance of \$1500. Mr. W. H. Henderson of Shreveport is president of the company. It is stated that the plant will be immediately rebuilt.

Messrs. Whitmer, Lane & Co. of Parsons, W. Va., one of the largest lumber firms in the State, whose extensive saw-mill plant is located at Dobbin, are getting in new machinery for the erection of another mill. This firm has been running its plant twenty-four hours a day for some weeks past, and is unable to fill its orders.

A charter was granted on the 28th ult. to the Pocahontas Lumber Co., composed of Norfolk and Baltimore capitalists. The capital stock is \$50,000. The principal office will be in Norfolk. The officers of the company are W. Edwin Perego of Baltimore, president; W. W. Robertson of Norfolk, treasurer and general manager, and E. A. Robertson, secretary. These, with L. V. Perego of Baltimore, J. W. Robertson and L. D. Starke of Norfolk, composed the directors.

A charter was issued last week to the W. M. Gunton Lumber Co., Limited, of Grant parish, Louisiana. The incorporators are W. M. Gunton, Waverly Whitaker, Thomas M. McGill, P. W. Huston and W. L. Whitaker, all of Chicago. This syndicate has been buying large quantities of timber land in Grant parish. It has also purchased a saw mill at Rochelle, La., and will operate it in September. The capital stock of the company has been fixed at \$150,000.

At a conference held in Brunswick, Ga., on the 22d ult. between the lumbermen of Brunswick, Jacksonville, Savannah, New York and other places and the officials of the Plant system, an amicable adjustment between the railroads and the lumbermen was reached in regard to the time allowed by the railroads for the unloading of lumber cars. The new rules will be formulated at once, and will be given to the lumbermen on the 1st of September. One of the most important of these rules is that lumbermen are to be allowed ten days to unload cars.

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# CONSTRUCTION DEPARTMENT.

**THE MANUFACTURERS' RECORD** seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with every one interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

\*Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery Wanted." In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the Manufacturers' Record.

It often occurs that the organization of a new company in a town is not known by the postmaster, and hence letters addressed to the company are returned marked "not known." The Manufacturers' Record reports the first organization of all companies, and our readers, in seeking to get into communication with them, should be very careful in deciding how to address them, and it is often advisable to add the names of one or more incorporators as an aid to the postmaster in delivering mail.

Mr. James E. Rigg of 224 Wister street, Germantown, Philadelphia, Pa., writes the Manufacturers' Record that he desires to locate a woolen and cotton goods manufactory in the South. The plant is one of 100 looms, with complement of carding, spinning, finishing and dyeing machinery, all ready for immediate operation. Any Southern community desiring to co-operate to secure this enterprise is asked to correspond.

## ALABAMA.

Alabama City—Furniture Factory.—The Chattanooga (Tenn.) Furniture Co., whose plant was recently burned, is negotiating to acquire a plant at Alabama City.

Anniston—Carpet Factory.—The Anniston Carpet Co. will erect a 200-foot addition, making the building 300 feet long; estimates on the construction are now being made; considerable additional machinery will be installed for carding, spinning, dyeing, weaving, etc.; James Buckler, manager.

Anniston—Lime Works.—The Lagarde Lime & Stone Co. (recently reported as incorporated) has for its object the mining of all kinds of ores and minerals, quarrying of stone and manufacture and sale of their products and compositions; chief product of plant will be standard sugar refinery and builders' lime, flux and macadam stone; present capacity of plant will be 500 bushels of lime and 1000 tons fluxing stone. For the purpose of filling immediate orders company has leased plant of Anniston Lime & Coal Co. (as mentioned in last issue); P. Bestor Brown, manager Anniston office.

Benton—Flour Mill.—Enos R. Stewart of Collinsville will erect a 25-barrel flour mill in Benton.

Birmingham—Electric Light Plant.—The Consolidated Electric Light Co. will increase its capital stock from \$500,000 to \$550,000 (as reported last week), to be used for extensions; Robert Jenison, president.

Birmingham—Iron Furnaces, Mines, etc.—The Union Steel & Chain Co., lately reported (under Tennessee) as incorporated under the laws of Delaware, has an authorized capital of \$90,000,000, fully paid and divided into \$30,000,000 of 7 per cent. non-cumulative preferred stock at \$100 a share, \$30,000,000 of common stock at \$100 a share. Of the capital stock, \$20,000,000 preferred and \$20,

000,000 common has been set aside for the purpose of acquiring properties and plants. The company has organized for the purpose of combining iron and steel plants, rolling mills, blast furnaces, chain works, ore and coal mines, etc., and has options on a number throughout the South, including Big Stone Gap (Va.) furnaces, D. S. Cook ore mines, Glen Wilton, Va.; Harriman (Tenn.) rolling mill, Jefferson Steel & Manufacturing Co., Birmingham, Ala., etc. William Itch of Boston, Perry Belmont, Jas. W. Hinkley, Henry W. Pocr, H. L. Horton and Frank Rockefeller, all of New York, are the financial directors; Chas. R. De Freest, secretary, Empire Building, New York city.

Birmingham—Mill and Elevator Company. The Alabama Mill & Elevator Co. has been incorporated, with a capital stock of \$10,000, by J. R. P. Durham, R. L. Dangerfield and Sid Norwood, to conduct a general milling business.

Courtland—Flour Mill.—F. T. Neely of Wheeler, Ala., is endeavoring to organize a stock company for erection of the flour mill lately mentioned; capacity sixty barrels per day.

Cullman—Electric Light Plant and Water Works.—Moore & McCrary of Atlanta, Ga., have contract at \$4900 for erection of electric-light plant, without engine; also for construction of water works; both plants previously mentioned; J. A. Holmboe, engineer, Louisville, Ky.

Dogwood—Coal Mines.—The Export Coal & Railroad Co. (reported several months ago as incorporated with a capital stock of \$30,000) has purchased 1000 acres of coal lands in Shelby county, and will begin mining with about 100 operatives. Percy T. Whilden is president; J. Fred Robertson of Charleston, S. C., vice-president; W. P. Golson, secretary; J. M. Duncan, engineer.

Florence—Cotton Mill.—The Florence Cotton Mills (lately reported as incorporated, with C. W. Ashcraft, president, for the establishment of a 2000-spindle mill) has enlarged its plans and will install 3000 spindles and 100 looms; contract for machinery and for material for construction of the buildings has been closed.

Huntsville—Brick Plant.—A. W. Feeney, formerly of Fayetteville, Tenn., has removed his steam brick plant to Huntsville; capacity 25,000 bricks per day.

Smith's Station—Cotton Mill.—Efforts are being made for the establishment of a cotton mill. Address L. M. Gates or J. C. Hayes, who have the matter in charge.

Sylacauga—Cotton Mill.—The McDonald Cotton Mills has purchased twenty-five acres of land from the North Sylacauga Land Co. on which to erect a 10,000-spindle cotton mill.

Wyeth City—Cotton Mill.—Dr. J. A. Wyeth is interested in the organization of a company for the establishment of the cotton mill mentioned last week. Address J. A. McKinstry.

## ARKANSAS.

Harrison—Lead and Zinc Mines.—The American Lead & Zinc Mining Co., recently reported as incorporated for the development of lead and zinc mines, will begin active operations in the near future; Thomas W. Johnson, president.\*

Little Rock—Grain Elevator.—T. H. Bunch will erect an elevator (as reported last week) for cleaning and handling grain, with capacity of 50,000 bushels.

Stephens—Cooperage.—The Texarkana Cooperage & Manufacturing Co., lately reported under Texarkana as incorporated, already has a plant in operation.

## FLORIDA.

Braldentown—Rice Mill.—J. B. Harris is establishing a rice mill.

Live Oak—Ginnery.—S. E. Sutton has purchased the Sessions milling plant (gin and grist mill), and will operate it, replacing the old gins with new machinery.

Pensacola—Flour and Grist Mill.—E. D. Thames of Greenville, Ala., will establish flour and grist mill in Pensacola.

Pensacola—Dry-kiln.—W. B. Wright & Co. have rebuilt their dry-kiln recently burned.

Pensacola—Telephone System.—The Southern Bell Telephone Co. will install an entire new plant at Pensacola; C. Sims, superintendent, Montgomery, Ala.

Pensacola—Electric-power Plant.—The Electric Street Car Co. is receiving bids for the construction of a new electric-light and

power-house under a franchise granted at last session of legislature; will also extend its present electric-car system.

## GEORGIA.

Albany—Power Plant.—The power company has applied for charter, and proposes to build a plant on the Kinchafoones creek to develop 1000 horse-power.

Athens—Broom Factory.—H. C. Kenney will establish broom factory, as recently reported; will operate as the American Broom Works.\*

Atlanta—Shoe Factory.—G. W. Manning, 203 Marietta street, is endeavoring to organize a stock company for the purpose of removing the plant of the Harbour Pitts Shoe Co. from Paducah, Ky., to Atlanta; capacity will be 500 pairs shoes per day.

Atlanta—Pants Factory.—McClellan, Griggs & Spier will establish a pants factory at 37 North Pryor street.

Augusta—Warehouses, Elevators, etc.—Henry Walters and B. F. Newcomer of Baltimore, Md.; W. G. Elliott, W. J. Craig and J. R. Lamar, all of Richmond county, have incorporated the Atlantic Coast Line Terminal Co. for the construction and operation of warehouses, elevators, stockyards, machine and car shops and other terminal facilities; capital stock \$40,000.

Augusta—Electric-light Plant.—Nesbit Wingfield, commissioner public works, has submitted a report for a municipal plant to cost about \$101,000.

Cedartown—Cotton Mills.—The Cedartown Cotton Co., organized, as reported last week, and will issue bonds for improvements. The new company comprises four companies (not four mills, as was at first stated); they are the Paragon Mills, the Cedartown Cotton Manufacturing Co., the Cedartown Warehousing Co. and the Cedartown Cotton Gin. Order has been placed for machinery to fill the Paragon Mills, to give a total of 12,500 spindles; as soon as this machinery is placed an extension will be made of present building to accommodate 9000 more spindles. Also Philadelphia (Pa.) parties have completed arrangements for leasing to the Cedartown Cotton Co. a 10,000-spindle mill, which they will build; this will cost about \$150,000.

Chicamauga—Coal Mines.—The Durham and Dillon mining companies, operating coal mines on Lookout mountain, near Chicamauga, have consolidated under one management as the Durham Coal & Coke Co.; output of mines will be doubled and 100 new coke ovens erected, making 300 to be operated by the company; 150 additional operatives will be employed.

Dahlonega—Mineral-land Development, etc. W. W. Murray, J. H. Moore and J. F. Moore have incorporated the Pioneer Exploitation & Development Co., with a capital stock of \$1,000,000, for the purpose of developing mineral lands, erecting plants for the reduction of ores, developing water-power, etc.

Dahlonega—Gold Mine.—G. W. Jenkins, J. B. Anderson and James Adams have formed a copartnership and are operating the Street gold mine.

Douglas—Electric-light Plant and Water Works.—The city will construct electric-light plant and water works. Address J. J. Walker, mayor.

Estelle—Ore Mines.—C. E. Buek of Richmond, Va., has secured the plant and ore mines of the Kensington Coal & Iron Co. at Estelle and will operate same at once.

Hogansville—Cotton Mill.—The Hogansville Manufacturing Co. (reported last week as incorporated) will erect a 5000-spindle duck mill; contract for building will be awarded next week; Jodson F. Mobley, secretary-treasurer.\*

Jefferson—Cotton Mill.—The Jefferson Cotton Mills (previously reported as incorporated) has completed its organization with J. W. Bell, president; J. C. Turner, vice-president and general manager; Frank Roberts, secretary-treasurer; capital stock \$60,000.

Lavenden—Coal Mines.—Coal has been discovered on the property of Miss Metalia Fouche, and will be developed.

Macon—Wagon Factory.—Lawson Brown will install new machinery to increase the capacity of his wagon factory.

Macon—Cotton Mill.—J. W. Cabanis, Samuel Mayer, N. M. Block, Henry J. Lamar and George L. Snowden have incorporated the Ocmulgee Cotton Mills, with a capital stock of \$100,000, for the establishment of a cotton mill.

Milledgeville—Electric-power Plant.—J. F. Wilson of Milledgeville and the American Pipe Manufacturing Co., No. 112 North Broad street, Philadelphia, Pa., are reported to be interested in the proposed building of an electric-power plant at Furman's Shoals; about \$400,000 will be expended on the plant and the erection of factories.

Millen—Cotton Mill.—Efforts are being made for the establishment of a \$100,000 cotton mill. Address W. S. Godbee.

Newnan—Sewerage System.—The city will chose an engineer to prepare plans and specifications for its sewerage system, for which \$20,000 was voted last week. Sealed proposals from engineers to be opened September 6. Address W. P. Nimmons, clerk.\*

Newnan—Cotton Mill.—The Newnan Cotton Mills has had plans made for a two-story addition 88x50 feet, to accommodate 3500 spindles; two-story warehouse 60x100 feet, with capacity for 1200 bales of cotton, and for an office building 18x40 feet; material used will be brick.

Rome—Furniture Company.—M. G. McDonald, Luke McDonald, J. C. Lewis and W. D. Stewart have incorporated the McDonald Furniture Co., with a capital stock of \$10,000, to conduct a general furniture and carpet business.

Rome—Mercantile.—James B. Hill, T. B. Owens and associates have incorporated the Farmers' Supply Co., with a capital stock of \$25,000, for the purpose of conducting a general dry goods, grocery and supply business.

Rossville—Woolen Mills.—The Park Woolen Mills will erect a brick addition, besides a number of small additions, warehouses, etc. About \$6000 worth of carding machines and looms has been purchased, also additional sewing machines for pants department; present equipment 100 looms.

Rossville—Hosiery Mills.—The Richmond Hosiery Mills state that the report that it would enlarge its plant at present was without foundation; no steps will be taken towards enlarging until after November 1; Garnett Andrews, Jr., manager.

Savannah—Varnish Works.—The Forest City Varnish Co. will increase its capital stock from \$20,000 to \$50,000. The additional \$30,000 capital will be used in enlarging the plant and adding to its facilities.

Savannah—Cotton Mill.—The Savannah Cotton Mills will in all probability be re-established and put in operation. It has equipment of 7500 spindles and forty-one cards. Horace A. Crane, vice-president of the Southern Bank, can probably give information.

Savannah—Sugar Refinery.—The establishment of a sugar refinery is contemplated. Address D. G. Purse, president Board of Trade.

Valdosta—Cotton Mill.—The Strickland Cotton Mills, recently reported as incorporated with a capital stock of \$150,000 for the erection of a 10,000-spindle mill, has decided to increase its capital \$25,000; 325 looms will also be installed.

## KENTUCKY.

Barboursville—Oil Lands.—The Welch Hackley Coal & Oil Co., it is reported, has purchased 17,934 acres of coal and oil lands near Barboursville, and will develop on an extensive scale.

Danville—Telephone System.—C. R. McDowell of Louisville and B. T. Woods of Perryville have incorporated the Boyle Citizens' Telephone Co., to operate in Boyle and adjacent counties; capital stock \$2200.

Earlington—Coal Mines.—The St. Bernard Coal Co. has purchased and will operate the Hecla coal mine.

Louisville—Saddlery.—W. G. Barrett and others have incorporated the W. G. Barrett Saddlery Co., with a capital stock of \$21,000.

Murfreesville—Water Works.—The construction of water works is talked of. Possibly "The Town Clerk" can give information.

Murray—Telephone Line.—The Calloway Telephone Co. has been organized, with Dr. J. R. Coleman, president; Dr. J. G. Hart, manager; company is constructing a toll telephone line from Murray to Mayfield; authorized capital \$4000.

Owensboro—Cotton Mill.—It is reported that a party of Owensboro and Southern capitalists will organize a \$150,000 company for the erection of a cotton mill. Names of interested parties will be announced later.



Owenton—Water Works.—William Lindsay and J. M. Herndon are organizing a company to establish water supply.

Paintsville—Coal Company.—The Sandy Valley & Elkhorn Coal Co. has been incorporated, with a capital stock of \$350,000, by John C. C. Mayo, Charles W. Wood, W. H. Vaughan and others.

Rock Haven—Saw Mill.—Dickinson & Co. are erecting a saw mill and installing four new steam drills.

Waverly—Flour Mill.—Hite & Greenwell will erect a 50-barrel-capacity flour mill.\*

#### LOUISIANA.

Lake Charles—Timber-land Development.—The Bancroft Lumber Co. of Orange, Texas, has purchased 14,035 acres of timber land in and near Lake Charles for \$175,000 and will erect saw mills for developing it.

Lake Charles—Iron Works and Machine Shops.—Work has been commenced on the Calcasieu Iron Works, lately formed by A. McKinnon of Lake Charles and Charles McFarlane of Orange, Texas; first building to be erected will be two-story, 110x40 feet, and contain machine shop, foundry and boiler works; other buildings will be erected as needed; full outfit of new machinery will be installed.

Marks (not a postoffice)—Glennery.—A stock company will be organized for the establishment of a five-gin mill. Names of interested parties will be announced later.

Natchitoches—Electric-light Plant and Water Works.—The city will hold an election to decide the issuance of bonds for construction of water works and electric lights to cost \$9000. Address John C. Trichel.

New Orleans—Plumbing, etc.—Cuthbert Schaefer, J. S. Galienne, A. Feiber, Dennis O'Day, H. H. Waters and others have incorporated the Schaefer-Galienne Co., Limited, with a capital stock of \$25,000, for plumbing, gas, steam and hot-water fittings, installation of electrical wires and apparatus, etc.

New Orleans—Fire-alarm Telegraph System.—The Fire & Police Telegraph Co., C. A. Ray, president, Louisville, Ky., has been awarded contract to put in a fire-alarm telegraph system at New Orleans to cost \$73,340.

New Orleans—Sewerage.—The mayor has named the seven district commissioners, as authorized by the act of the legislature passed at the recent extra session, for the expenditure of \$14,000,000 for drainage and sewerage purposes; commissioners are John T. Gibbons, William Adler, Dennis Lanaux, Cartwright Eustis, Frank A. Daniels, Chas. A. Janiver and William Atkinson.

Norwood—Cotton Mill.—J. A. Redhead, Centerville, Miss.; Dr. L. G. Perkins, D. A. Gayden, I. D. Norwood, H. S. Perkins, M. C. Bridges and W. A. West are leading promoters in the organization of a \$50,000 stock company for the establishment of a \$25,000 cotton mill to employ about 150 operatives; \$30,000 has already been subscribed. Address W. A. West.\*

Shreveport—Cotton Gin.—Colquitt & Tigner will rebuild their cotton gin recently reported burned.

Vivian—Planing Mill.—The Henderson Lumber Co. will rebuild its burned planing mill.

#### MARYLAND.

Baltimore—Medicine Company.—Chartered: The Yohn Chemical Co., for dealing in patent medicines and chemical specialties, by Clarence H. Forrest, William Howard, John T. Barclay and others; capital stock \$100,000.

Mt. Savage—Coal Lands.—Mr. and Mrs. Joseph Miller will arrange for the purchase of thirty acres of coal lands near Mt. Savage.

Tuxedo Park—Water Works.—The Tuxedo & Embla Park Water Co. will establish water works to supply Tuxedo Park and Embla Park. Address J. C. McKennle, 401 Herald Building, Baltimore, Md.\*

Washington, D. C.—Building and Construction Company.—The American Construction Co. has been incorporated to conduct a general building and construction business; capital stock \$200,000. J. Forrest Manning is president; Louis Wechsler of New York, vice-president; Arthur A. Birney, treasurer; Henry F. Woodward, secretary.

#### MISSISSIPPI.

Durant—Electric-light Plant.—The city has decided to issue \$10,000 of bonds for erection of an electric-light plant. Address "The Mayor."

Kosciusko—Cotton Mill.—A company has been organized, with C. C. Kelly, president; F. Z. Jackson, vice-president; Walter Burgess, secretary and treasurer, for the erection of a cotton mill; \$75,000 has been sub-

scribed to the capital stock, which will be \$100,000.

Pass Christian—Telephone System.—The American Telephone & Telegraph Co. of Mississippi has been incorporated, with a capital stock of \$25,000, by Edward J. Hall, Edward P. Meany, N. Eggleston and others.

Raymond—Cotton-oil Mill.—Efforts are being made for the establishment of a cotton-seed-oil mill. Address William Dillon for particulars.

Summit—Electric-light Plant.—Edward J. Obeirne of Chinchuba, La., has received contract at \$7400 for construction complete of the electric-light plant recently mentioned. Address "The Mayor."

West Point—Cotton Compress.—The West Point Compress Co. has been incorporated by A. S. Johnston, C. A. Johnston, S. L. Heath and others.

#### MISSOURI.

Aurora—Lead and Zinc Mines.—The Rosebud Mining Co. has been incorporated, with a capital stock of \$24,000, by W. M. Farmer, John L. Brown, W. E. Schwind and others.

Cassville—Lead and Zinc Mines.—J. W. McDonald, Turner T. Lewis and Dr. A. V. L. Brokaw have purchased 2600 acres of mineral lands near Cassville, and have options on 1900; purchasers will organize a \$50,000 stock company for developing the property.

Galena—Lead and Zinc Mines.—The Olympia Zinc Co. (lately reported as incorporated) has leased four and one-half acres in Southwest Missouri and is erecting a crusher with steam jigs for separating lead and zinc ores; mill will cost \$7500; capacity about 100 tons of crushed rock per shaft of ten hours. For particulars address L. M. Hall, 315 Commercial Building, St. Louis, Missouri.

Kansas City—Commission Company.—Chartered: The Goodloe-McClelland Commission Co., with a capital stock of \$50,000, by H. B. Sanborn, J. W. Goodloe and T. A. McClelland.

Kansas City—Woodworking Factory.—The Montgomery-Thayer Manufacturing Co. (reported recently as incorporated) has purchased building and installed machinery for manufacture of wood articles; will later on install machinery for manufacturing wagon tongues, axletrees and wagon bolsters; capacity 350 dozen handles per day.

Kansas City—Lead Mines, etc.—Incorporated: The B. S. Reber Lead & Zinc Mining Co., capital stock \$50,000, by R. E. Neal, J. S. Reber, A. S. Kimberley and others.

Kansas City—Medicine Company.—Incorporated: The Moore Medicine Co., capital stock \$2000, by J. A. M. A. and Thomas E. O'Riley.

Kansas City—Fruit Company.—Chartered: The Glinochio-Jones Fruit Co., by David E. Glinochio, R. Henry Jones and others; capital stock \$30,000.

Kansas City—Lead and Zinc Mines.—W. F. Wymann, E. K. Corle, J. M. Malang and George Peake have incorporated the Success Zinc & Lead Mining Co.; capital stock \$100,000.

Kansas City—Commission Company.—The Ryan-Robinson Commission Co. has been incorporated, with a capital stock of \$50,000, by R. W. Ryan, F. G. Robinson and James Keeny.

Kansas City—Bed-spring Company.—D. M. Bone, Leslie E. Baird and others have incorporated the Bone-Baird Spring Bed Co., with a capital stock of \$3000.

Neosho—Lead and Zinc Mines.—The Morning Glory Mining & Milling Co. has been incorporated, with a capital stock of \$16,000, by J. M. Ritchey, S. E. Roberts, W. G. Wells and others.

Odessa—Electric-light Plant.—The city will hold an election September 12 to decide as to \$10,000 in bonds for erection of electric-light plant. R. B. Sticher of Louisiana, Mo., will prepare plans and specifications. Address "The Mayor."

Sedalia—Flour Mill.—P. H. Eisenmayer, J. Eisenmayer, J. M. De Jarnett and others have incorporated the Eisenmayer Roller Mill Co., with a capital stock of \$25,000.

St. Joseph—Lead and Zinc Mines.—The Price Mining Co. has been chartered by H. S. Price, George M. Johnson, R. K. Cooper and others.

St. Louis—Construction.—Chartered: The Hall Grading & Construction Co., with a capital stock of \$11,000, by Henry Hall, John Veto and Henry Nicholson.

St. Louis—Box and Crate Company.—Theodore J. Klinge, Edward P. Becker and Arthur I. Ratz have incorporated the Merchants' Box & Crate Co., with a capital stock of \$6000.

St. Louis—Hat Company.—Chartered: The

George Diehl & Bros. Hat Co., with a capital stock of \$15,000, by George Diehl, G. F. Diehl and others.

St. Louis—Nut-lock Company.—The Climax Nut Lock Co. has been incorporated, with a capital stock of \$50,000, by Wilmer Dickerson, James R. Arrendale, Willis E. Leeds and others.

St. Louis—Oil Company.—Frederick Nobbe, John Sans and Hedwig Heuseler have incorporated the George Heuseler Oil Co., with a capital stock of \$10,000.

St. Louis—Paper Company.—T. P. Chapman, W. H. McDonald, G. P. Chapman and others have incorporated the T. P. Chapman Paper Co., with a capital stock of \$10,000.

Webb City—Lead and Zinc Mines.—Chartered: The Mary S. Lead & Mining Zinc Co., capital stock \$50,000; F. J. Ball, C. G. Smallhouse, F. H. Danglade and others, incorporators.

Webb City—Hardware.—The Franz-Howell Hardware Co. has been incorporated, with a capital stock of \$18,000, by E. W. Franz, F. S. Howell and G. A. Buder.

#### NORTH CAROLINA.

Bayboro—Transportation Company.—J. F. Cowell, S. W. Ferrebee, W. H. Sawyer and A. B. Campen have incorporated the Bay River Transportation Co., with a capital stock of \$7000 to \$15,000, for operating a line of steamers.

Burgaw—Saw Mill.—R. J. Boyd has established a saw mill, with daily capacity of 15,000 feet.

Conetoe—Crate and Barrel Factory.—A crate and barrel factory to cost \$7000 will be erected. Address Claud Wilson, said to be interested.

Gastonia—Cotton Mill.—George A. Gray and John F. Love are figuring on a cotton mill of from 25,000 to 50,000 spindles and from 1200 to 2500 looms.

Kernersville—Woolen Mill.—J. F. Kerner of Kernersville and Virginia parties have organized a company, with \$10,500 capital subscribed, for establishment of the woolen mill reported last week; building will be three stories, 40x80 feet, with boiler, engine-room and dyehouse attached; machinery has been purchased; twenty-five operatives employed.\*

Kinston—Fertilizer Factory.—C. M. Jones of Kinston and M. S. Hamlin of Winston will establish a factory for preparing tobacco stems for fertilizing purposes.

Mt. Atry—Water-power Development.—It is reported that a company is being organized to utilize more of the water-power on the Dan river. T. E. Houston can probably give information.

Raleigh—Copper Mines.—The company reported last week to be organized for the development of copper mines near Raleigh will be known as the Copperville Mining & Development Co., incorporated with a capital stock of \$25,000 by Frank Stronach, C. H. Belvin, J. W. Harding, J. R. Chamberlain and Henry E. Litchfield.

Raleigh—Laundry.—B. W. Baker has purchased the Excelsior Steam Laundry, and will equip it with new machinery, including a large tank for storing distilled water.

Spray—Cotton Mill.—B. Frank Mebane, F. L. Fuller and W. R. Walker have incorporated the American Development Co., with a capital stock of \$100,000 to \$1,000,000, for the manufacture of cotton, wool and silk into articles of all kinds.

Wadesboro—Cotton Mill.—The Norwood Cotton Mill will double capacity; present equipment 5000 spindles.

#### SOUTH CAROLINA.

Abbeville—Corn and Flour Mill.—J. R. Blake, Jr., and others will erect a roller flour mill, as reported last week; to be a four-stand mill, with daily capacity of fifty barrels; will also erect a corn mill of 250 to 300 bushels daily capacity. Contract for buildings and machinery will be let within thirty days.

Columbia—Electric-power Plant.—W. B. Smith Whaley and associates have purchased the property of the Columbia Street Railway, Light & Power Co. for \$257,500, and will begin at once the renovation and reconstruction of the plant, installing new machinery for applying additional power, etc.

Columbia—Cotton Mill.—A company will be incorporated, with a capital stock of \$100,000, for the establishment of a 5000-spindle and 180-loom cotton mill, plans for which are now being prepared. W. B. Smith Whaley is said to be at the head of the enterprise.

Columbia—Ice Factory.—The Consumers' Ice Co. will erect. It is reported, an ice factory.

Barnwell—Cotton Compress.—The Southern Round Bale Cotton Co. (recently reported as incorporated) will gin, press, bale cotton and compress it by steam, water or other power, manufacture cottonseed oil and grain for market. The cotton-gin and press plant is equipped with the Munger-Pratt system of four 70-saw gins and the American Cotton Co.'s double 35-inch round-bale press; F. J. Devereux, secretary-treasurer.

Darlington—Fertilizer Factory.—The Virginia-Carolina Chemical Co., Richmond, Va., recent purchaser of the Darlington Phosphate Co., has decided to double the capacity of the plant, making it a \$200,000 mill.

Darlington—Cotton Mill.—The Darlington Manufacturing Co. will install 6000 additional spindles; present equipment 11,040 spindles and 384 looms.

Edgefield—Cotton Mill.—The Edgefield Manufacturing Co. is installing fifty new looms, as reported last week; this makes a total equipment of 212 looms and 5000 spindles, and completes the equipment of its present building; company hopes within the next year to increase the size of the building and double the size of mill, but has not as yet decided when the addition will be made; Charles H. Fisher, president and treasurer.

Gaffney—Machine Works.—The proposed Cherokee Foundry & Machine Works Co. has completed its organization, with T. H. Littlejohn, president; L. Y. Randall, vice-president; L. D. Sneed, secretary-treasurer, and L. Y. Randall, general manager; company will secure location and erect all necessary buildings for its works, installing the most approved machinery.

Kershaw—Flour Mill.—Farmers' Banking and Mercantile Agency, Lancaster, S. C., has placed contract for erection of a 60-barrel flour mill at Kershaw.

Lando—Cotton Mill.—The Manetta Mills will increase its capital stock from \$40,000 to \$100,000; present equipment 5000 spindles.

Ridge Springs—Canning Factory.—F. G. Asbill has established a canning factory (as reported last week), with capacity of 3000 cans per day, and expects to increase to 5000 cans per day.

#### TENNESSEE.

Bumps Mills—Flour Mill.—A. J. Bumps has awarded contract for remodeling his 40-barrel flour mill.

Charleston—Tripoli Deposits.—S. J. Aiken, Ed. Mayfield and associates have purchased tripoli beds near Charleston and will soon begin mining operations.

Chattanooga—Bicycle-specialty Factory.—Efforts are being made by Gorton & Busbey of Winchester, Tenn., to locate a plant in Chattanooga for the manufacture of bicycle specialties invented by Charles Gorman of Chicago, Ill.

Chattanooga—Publishing.—The Bradt Printing & Publishing Co. has been incorporated, with a capital stock of \$5000, by G. M. Bradt, O. C. Dilley, H. B. Goodman and others.

Chattanooga—Iron Furnaces, etc.—The Roane Iron Co. of Rockwood is reported as to erect a new iron furnace near Chattanooga and develop a new coal field; Capt. H. S. Chamberlain, president.

Columbia—Phosphate Mines.—G. M. Fogg of Nashville, Tenn., has purchased for \$12,000 and will develop eighty acres of phosphate lands near Columbia.

Columbia—Phosphate Mines.—A Virginia syndicate has purchased 250 acres of phosphate lands for \$30,000 near Columbia, and will develop.

Concord—Flour Mill.—Charles Russell is putting new machinery in his flour mill.

Covington—Cotton Gin.—The Covington Gin Co. has been incorporated, with a capital stock of \$8000, by W. M. Black, T. Addison, W. V. McFadden and others.

Crossville—Coal Mines.—The Citizens' Co-operative Coal Land Co. has commenced the development of its coal property.

Crossville—Coal Mines.—The Cumberland Coal Co. is developing coal mines near Crossville.

Gallatin—Phosphate Mines.—The Sumner Phosphate Co. has purchased phosphate lands in Sumner county for \$451,000 and will develop.

Gallatin—Tobacco Factory.—Breckenridge Malone is organizing a company to manufacture smoking and chewing tobacco; capital stock \$3000.

Gamble—Canal.—C. F. Boyer, president Tennessee Lumber Canal Co., Maryville, Tenn., will construct a canal from Gamble up the Little river.\*

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Gamble—Tannery.—England & Bryan, Third and Vine streets, Philadelphia, Pa., will erect a tannery at Gamble.

Jackson—Cotton Mill.—A stock company with capital of \$75,000 will be formed, and estimates have been made for the establishment of a 3000-spindle and 200-loom mill. Address Capt. Thomas Tate.

Memphis—Ginnery.—M. Foster, S. Foster, H. F. Robinson, W. C. McNutt and others have incorporated the Foster-Robinson Cotton & Ginning Co. for the purpose of ginning cotton, etc.; capital stock \$17,000.

Memphis—Paper-box Factory.—A. L. Rowell, H. W. Dixon, A. C. Stephens, L. D. Bruce and others have incorporated the Merchants' Paper Box & Printing Co. for the manufacture of paper boxes; capital stock \$40,000.

Memphis—Shoe Company.—The Frank G. Jones Shoe Co., recently organized with a capital stock of \$75,000 to conduct wholesale shoe house; Frank G. Jones, president.

Meridian—Coal Mines.—R. P. Powell of Brooklyn, Tenn., is developing coal mines near Meridian.

Morristown—Telephone Exchange.—The East Tennessee Telephone Co. has received franchise and will put in exchange.

Mt. Pleasant—Flour Mill.—S. H. Goodloe and W. S. Jennings will erect a 100-barrel capacity flour mill.

Mt. Pleasant—Street Improvements.—The city will expend \$5000 on street improvements. Address "The Mayor."

Mt. Pleasant—Saw and Planing Mill.—W. D. Cooper and M. E. Wheeler will establish saw and planing mill.

Oldtown—Lumber Mill.—T. J. Scanlon & Co. have established a stove and lumber mill near Oldtown.

Sparta—Spike Factory.—J. R. Tubbs is installing new machinery to enlarge his spike factory, as recently noted; capacity 100,000 finished spikes per month; operating employees twenty-five.

Waco—Phosphate Mines.—Ragsdale, Daly & Co. of Pulaski have purchased farms of Robert J. and J. W. McLaurin, and are developing phosphate.

Waynesboro—Phosphate and Iron Mines.—William Thomas & Son have discovered and will develop phosphate and iron deposits on their property.

## TEXAS.

Beeville—Electric-light Plant and Water Works.—It is reported that a representative of the Dudley Machinery & Supply Co. of San Antonio, Texas, has purchased the water-works plant at Beeville from J. M. Brownson of Victoria, Texas, and will put the plant in operation. It is stated that the plant will be improved and extended and an electric plant installed; also contemplated is the erection of an ice factory.

Bonham—Laundry.—The City Steam Laundry, recently reported as incorporated, will erect a \$2000 plant.\*

Calvert—Bridge.—A pontoon bridge will be constructed across Brazos river at the Black bridge site. Address "The Mayor."

Corsicana—Petroleum, etc., Development. J. S. Cullinan, G. E. Strong, James Garitty and J. E. Whittle have incorporated the Corsicana Petroleum Co. for the purpose of producing petroleum, oil, gas and other mineral products; capital stock \$300,000.

Cuero—Electric-light Plant.—The city council is about to consider a proposed issuance of bonds for an electric-light plant.

Dallas—Irrigation.—The Trinity Irrigation Co. has been incorporated, with a capital stock of \$20,000, by W. A. Shaw, W. C. Hull and E. M. Foster.

Dallas—Chartered: The Llewellyn Lake & Park Co., with a capital stock of \$30,000, by Ben. E. Cable and others.

Denison—Cotton Mill.—J. A. Smith, Hiram Brooks and B. M. Seward have incorporated the American Cotton Spinning Co., with a capital stock of \$100,000.

El Paso—Fire-alarm System.—Contract will be awarded for construction of a telegraph fire-alarm system. Address "The Mayor."

El Paso—Gold, Silver, etc., Mines.—The El Paso Mining Co. has been incorporated, with a capital stock of \$1,500,000, to mine for copper, gold, silver and other minerals, by E. Krouse, George C. Wimberly, J. P. Goodwin, J. H. Smith and others.

Galveston—Ice Plant.—The Galveston Brewing Co. (late reported to double capacity) will add an additional 50-ton tank and boiler; B. H. Peters, general manager.\*

Galveston—Printing, etc.—Chartered: The F. J. Finch Stationery & Printing Co., with a capital stock of \$25,000, by F. J. Finch, A. F. Roemphie and others.

Henrietta—Smelter.—It is reported that a party of Boston capitalists has been inspecting the copper mines of Clay county and will erect a large smelter.

McKinney—Flour and Corn Mill.—The Collin County Mill & Elevator Co. will rebuild its plant, reported last week as burned; capacity 400 barrels of flour and 200 barrels of corn per day.\*

Smithville—Bottling Works.—The bottling works lately mentioned has been established by Ware & David.

West—Cotton Gin.—Christian Bros. will erect a new gin.

West—Cotton-oil Mill.—The West Cotton Oil Co. will install new cottonseed-oil mill, with huller and crusher machinery, to be followed by a complete plant.

## VIRGINIA.

Alexandria—Medicine Factory.—The Kretol Chemical Co. has been incorporated for the purpose of manufacturing face washes, toilet preparations, patent medicines, etc., with Anna Campbell of Boston, president; Thos. Henson, New Brighton, Pa., vice-president; R. W. Browne of Washington, D. C., secretary, and Thomas B. Campbell of Washington, D. C., treasurer; capital stock \$15,000.

Basic City—Copper Mines.—J. P. Chapman, Alexander McNabb and Col. T. S. Doyle will develop copper mines in Franklin county.

Basic City—Agricultural-implement Factory.—J. P. Chapman and associates have purchased the American Car Works, and will operate it as an agricultural-implement factory, manufacturing especially the Warrick corn-husker. The Warrick Manufacturing Co. will be incorporated by J. W. Warrick, Alex. McNabb, J. P. Chapman and others, under the laws of Indiana, for the purpose of operating this plant. A dryhouse will also be erected. Address for particulars J. P. Chapman, care of The Belmont, Basic City.\*

Berkley—Knitting Mill and Box Factory.—The Berkley Knitting Mills has been incorporated, with a capital stock of not less than \$5000 nor more than \$25,000, for the purpose of manufacturing yarn, knitted goods and other textile products, to conduct a dyeing and bleaching business, and for the manufacture of paper boxes.

Berryville—Water Works.—The city has definitely decided concerning the construction of water works, and is now advertising for bids for supplies, etc. For specifications, forms of proposals, etc., address T. S. Thompson, recorder.\*

Danville—Shuttle Factory.—George N. Cove will establish a shuttle factory. Address Mr. Cove, care of W. W. Waddill.

Hampton—Power-house and Ice Plant.—Henry Brauns of Baltimore has completed plans for the power-house and ice plant of the Newport News & Old Point Comfort Railway & Electric Co.; plans call for a brick building 109x172 feet, to have boiler capacity of 2000 horse-power and generators and dynamos having capacity of 3000 horse-power; this plant will furnish power for the railway and supply the surrounding towns with electric lights and power; in connection an ice plant will be installed, with daily capacity of forty tons.

Lexington—Telephone System.—The Lexington Mutual Telephone Co. and the Lynchburg Telephone Co., reported last week to construct a line from Lexington to Lynchburg, have as yet signed no contracts for construction of the system.

Norfolk—Lumber Mills.—The Pocahontas Lumber Co. has been incorporated for the purpose of conducting and transacting the lumber business in all its branches, details and departments in the States of Virginia, North Carolina and elsewhere; capital stock from \$10,000 to \$50,000; W. Edwin Perego of Baltimore, Md., president; W. W. Robertson of Norfolk county, treasurer and general manager; E. A. Robertson of Norfolk county, secretary; these, with J. W. Robertson and L. D. Starke, Jr., of Norfolk, compose the board of directors.

Petersburg—Ice Factory.—The Williams & Sons Co. will erect a large ice factory.

Richmond—Paper-box Factory.—J. O. Phillips of Richmond and Arthur L. Phillips of Louisville, Ky., have organized J. O. Phillips & Co. and established a plant at Ninth and Broad streets for the manufacture of paper boxes.

Richmond—Swimming Pool.—A company has been formed for establishing a perfectly equipped swimming pool. Names of interested parties will be announced later.

Roanoke—Iron Furnace.—C. R. Baird & Co. of Philadelphia, Pa., have purchased the West End furnace and are repairing it preparatory to putting in blast; the large stack-

house will be rebuilt and other improvements made; capacity of plant 200 tons per day; about 150 operatives will be employed. The plant was owned by Robert E. Todd & Co. of New York.

Staunton—Condensed-milk Plant.—Parties owning and operating a condensed-milk plant are desirous of locating in Staunton or vicinity a plant (as reported last week), but nothing definite has been done. Address O. K. Lapham, Alderson, W. Va.

## WEST VIRGINIA.

Burnersville—Flour Mill.—J. L. Teeter is erecting a 30-barrel flour mill; contract let.

Charleston—Distillery.—Charter has been granted to J. & J. M. Saffell, Louisville, Ky., for the manufacture of whiskey, etc.; capital stock \$4000.

Clarksburg—Oil Wells.—The Independent Oil Co., reported last week as incorporated by C. M. Hart and others, will develop 260 acres of oil lands near Cherry Camp, machinery for which has been purchased.

Clarksburg—Window-glass Factory.—The Lafayette Window Glass Corporation (reported during the week) has decided to build a 12-pot window-glass factory at Clarksburg to cost \$24,000; will employ seventy-five operatives, and within two years double the plant. Address the company, care of Pine Grove Manufacturing, Land & Improvement Co.\*

Clarksburg—Window-glass Factory.—The Lafayette Window Glass Co-operative Co. has been incorporated, with an authorized capital of \$50,000, for the establishment of the window-glass factory reported last week. Incorporators are Eugene Knapp of Belvernon, Pa.; Leopold Costieux, Emil Costieux, Julian Coussins of New Kensington, Pa.; Nicholas Folan, John J. Turnick and Henry Turnick of Pittsburg, Pa.

Dobbin—Saw Mill.—Whitmer, Lane & Co. will erect a new saw mill.

Farmington—Coal Mines.—The American Coal Co. of Lonaconing, Md., J. H. Pafrott, superintendent, has optioned 20,000 acres of coal land near Farmington; purchase of the land will probably be decided at an early date.

Parkersburg—Drilling Company.—The Boggs Drilling Co. has been incorporated, with a capital stock of \$10,000, by J. F. Boggs, E. R. Steyner, C. E. Gilmore and others.

Parkersburg—Distillery.—Chartered: The Boggs Distilling Co., with a capital stock of \$100,000.

Wheeling—Brick Plant.—The Suburban Brick Co. has decided to establish a new brick plant, with daily capacity of 100,000 bricks and to cost about \$50,000.

## BURNED.

Greenville, Texas.—The Texas Planters' Co.'s cotton gin; estimated loss \$12,000.

Honey Grove.—Fritz Messenger's ice factory; estimated loss \$10,000.

Minden, La.—Zack Martin's saw mill, grist mill and ginnery.

Nettleton, Miss.—James Randolph's cotton gin; estimated loss \$3000.

Vivian, La.—Henderson Lumber Co.'s planing mill; estimated loss \$8000.

Whaleysville, Md.—The Petey Manufacturing Co.'s basket and crate factory; estimated loss \$3000.

## BUILDING NOTES.

Augusta, Ga.—Building.—C. L. Rounds has been awarded contract at \$28,000 for erecting the proposed Montgomery Building; A. C. Bruce, Atlanta, architect.

Baltimore, Md.—Building.—J. Evans Sperry is preparing plans for a five-story 60x85-foot addition to the building of the Baltimore Bargain House, Jacob Epstein, proprietor, to cost \$150,000.

Baltimore, Md.—Bank Building.—Baldwin & Pennington have completed plans for the twelve-story bank building to be erected by the Guardian Trust Co. at a cost of about \$950,000.

Baltimore, Md.—Church.—Site has been purchased at \$13,000 on which the congregation of St. John's Methodist Church will erect a \$25,000 edifice, to be of granite; Rev. John S. Bowers, pastor.

Baltimore, Md.—Warehouse.—Thomas C. Kennedy is making plans for a five-story warehouse for the Maryland Biscuit Co., to be of brick, stone and iron.

Bay St. Louis, Miss.—Business Building.—J. G. Fayard contracted for erection of two-story business house.

Brownsville, Tenn.—Warehouse.—Capt. J. B. Phillips will erect a large cotton-storage warehouse.

Charleston, S. C.—Store Building.—William Platt & Co. will enlarge building by erection of additional story 50x80 feet.

Charleston, W. Va.—Capitol Annex.—Sealed proposals for the erection and completion of the Capitol annex in accordance with drawings and specifications prepared by Harrison Albright, will be received until September 14. Drawings and specifications may be seen at the senate chamber, in the Capitol, between the hours of 9 and 11.30 A. M. and 2 and 5 P. M. from Thursday, August 14 until September 14. Each proposal must be accompanied by a certified check. Printed specifications may be had of secretary of the board. Proposals must be on the blank to be had of the secretary of the board. Address all communications regarding drawings and specifications to Harrison Albright, architect, Charleston, W. Va.; make certified checks payable to the order of the State treasurer, and address all proposals to the undersigned, marked on outside "Proposals for Annex." Usual rights reserved. Wm. M. O. Dawson, secretary board of public works.

Charlotte, N. C.—Store Building.—W. C. West will erect large store building.

Chattanooga, Tenn.—Dwellings.—D. J. Sauls has awarded contract to T. A. Chambers for erection of two two-story frame dwellings to cost \$3000.

Chattanooga, Tenn.—Armory.—Peter Levi & Co. have received contract for erection of the proposed armory to cost \$3478, and of iron construction.

Chicamauga, Ga.—Dwellings.—The Durham Coal & Coke Co. will erect tenement-houses for operatives.

Christiansburg, Va.—Barn.—W. W. Gray has received contract for the erection of a \$5000 barn for Blacksburg College.

Cleburne, Texas—Opera-house.—A stock company is being formed for erection of an opera-house. W. O. Brown is the promoter.

Conroe, Texas—Depot.—The International & Great Northern and Santa Fe Railway companies will erect a new depot at Conroe; Leroy Trice, general superintendent of the I. & G. N., Palestine, Texas.

Cooper, Texas—Courthouse.—The city has issued \$35,000 of bonds for erection of new fireproof courthouse. Address "The Mayor."

Crossville, Tenn.—Dwellings.—The Cumberland Coal Co. will erect operatives' dwellings.

Durant, Miss.—School Building.—The city will expend \$12,000 for erection of a school building. Address "The Mayor."

Florence, Ala.—Courthouse.—The commissioners of Lauderdale county have authorized the issue of \$24,000 warrants for the purpose of building the courthouse lately reported. Address John B. Weakley, Jr., mayor.

Fort Worth, Texas—Church.—Plans have been prepared for the erection of a \$15,000 building for Broadway Presbyterian Church, constructed of Roman pressed brick, with stone trimmings. Address "The Pastor."

Franklinton, N. C.—Warehouse.—I. G. Staunton, B. W. Ballard, A. D. Mitchner, R. W. Hicks and others have incorporated the Franklin Warehouse Co., with a capital stock of \$10,000, to establish a tobacco warehouse.

Frostburg, Md.—Business Block.—Dr. C. C. Jacobs is preparing plans for a three-story 65x65-foot business block.

Gilmer, Texas—Depot.—The St. Louis Southwestern Railway will erect a depot at Gilmer; Russell Harding, general manager, St. Louis, Mo.

Gonzales, Texas—Church.—The Methodists have decided to erect a \$6000 church. Architect Ruduelli of Houston is preparing plans.

Greenville, S. C.—Hotel.—R. W. Moody and I. H. Moorehead, lessees of the Windsor Hotel, have contracted for remodeling the building throughout.

Huntsville, Ala.—School.—There is no truth in the report that the city will issue \$20,000 of bonds for erection of school building; Alfred Moore, mayor.

Louisville, Ky.—Station-house.—Board of public safety has awarded contract to Chas. H. Seaman at \$5760 for the erection of proposed new station-house.

Louisville, Ky.—Houses.—Mrs. Sarah G. Weatherford will build six two-story frame dwellings to cost \$6000. Theodore Ahrens, Jr., will erect four two-story brick dwellings to cost \$25,000.

Louisville, Ky.—Hotel.—A. J. Ross will enlarge and improve the Rossmore Hotel, as reported last week, at a cost of \$25,000; improvements will include steam heat, electric plant, etc.

Louisville, Ky.—Warehouse.—William H. Stone, James G. Stone, Samuel H. Stone and Eugene M. LeCompte have incorporated the



Stone Tobacco Warehouse Co., with a capital stock of \$20,000, to conduct a general tobacco warehouse, etc., business.

Millen, Ga.—Hotel.—The hotel lately mentioned to be erected by W. S. Godbee will cost about \$7000.

Moundsville, W. Va.—Building.—The penitentiary board has ordered erection of two-story 40x40-foot kitchen annex building to cost \$3000.

Mountain Lake Park, Md.—Auditorium.—The Mountain Lake Park Association will erect a new auditorium with seating capacity for 3500, to cost \$8000.

Mt. Pleasant, Tenn.—Buildings.—Harvey Adams of Knoxville is erecting a \$10,000 residence for George W. Killebrew; \$5000 residence for H. D. Ruhm is being erected by H. D. Alford; Granbery Jackson, representing Nashville capitalists, will erect a three-story business block and opera-house, brick, with stone trimmings, 128x140 feet; M. E. Wheeler and others will erect a three-story business block to cost \$50,000; John W. King is receiving bids for the erection of three two-story brick business houses; George W. Killebrew has contracted for erection of twelve dwellings to cost \$20,000; Harvey Adams of Knoxville is erecting a \$15,000 church building for Presbyterian congregation.

New Martinsville, W. Va.—Courthouse.—H. R. Thompson, clerk county court, will receive plans and specifications until October 3 for courthouse for Wetzel county; cost not to exceed \$30,000; usual rights reserved.

New Orleans, La.—Building.—Plans and specifications are asked for a home for incurables to cost about \$30,000; Wm. K. Walsh, chairman building committee, 1808 Peters avenue.

Newport News, Va.—Business Building.—Powell Bros. & King have purchased site at \$20,000 and will erect a four-story business building to cost \$15,000.

Newport News, Va.—Office Building.—R. G. Bickford and Governor P. T. Woodfin have purchased site for \$20,000 and are having plans prepared for the erection of a five-story office building to cost \$25,000.

Parrish, Ala.—Depot.—The Southern Railway Co. will erect a new depot; Frank S. Gannon, general manager, Washington, D. C.

Petersburg, Va.—Car Sheds.—The Southern Railway & Development Co. will erect car shed 253x85 feet, with capacity for storing thirty-six cars.

Statesville, N. C.—T. D. Miller and A. P. Barron will erect a one-story 160x60-foot warehouse.

St. George, S. C.—Jail.—Bids are wanted for erection of proposed jail building. Address "The Mayor."

St. Louis, Mo.—School.—St. Mary's Catholic Church will erect a two-story building, to be used as a parochial school; cost \$20,000.

Washington, D. C.—Buildings.—Permits issued to P. J. Hoffinger to erect two-story brick dwelling, press-brick front, flat tin roof, furnace heat, cost \$5500; to Joseph H. and A. S. Clarke, two apartment-houses, three stories, 76x79 feet, press-brick fronts, flat tin roof, hot-water heat, cost \$35,000.

Wheeling, W. Va.—Residence.—Plans have been prepared by Glessey & Faris and contract awarded to Wood Bros. for the erection of a \$20,000 brick residence for Col. W. H. Nave.

## RAILROAD CONSTRUCTION.

### Railways.

Atlanta, Ga.—Petition has been presented for the incorporation of the Chattanooga, Augusta & Charleston Air Line Co. to build a road 210 miles, connecting Charleston with Chattanooga.

Bowling Green, Ky.—The second track of the Louisville & Nashville Railroad is being made between Bowling Green and Memphis Junction, four miles.

Butler, Ala.—Citizens of Choctaw county are seeking to induce the building of the Mobile & West Alabama Railway through the county.

Carthage, Mo.—Work upon the extension of the Southwest Missouri Electric Railroad from Galena to Riceville, Kans., will begin shortly. The road will ultimately connect Carthage, Mo., by way of Joplin, Webb City, Cartersville, Galena, Riceville, with Baxter Springs, Kans.

Charleston, W. Va.—Surveys have begun for a route to connect Hocking Valley Railroad in Ohio with the Chesapeake & Ohio Railway. It is not known whether the connection will follow the Kanawha valley to Charleston or will run to Huntington.

Chattanooga, Tenn.—It is announced that

surveys for the Missing Link Railroad, to run for 150 miles from Chattanooga across Northern Georgia to Walhalla, S. C., will begin October 1.

Chattanooga, Tenn.—The contract for grading the Middle Tennessee & Alabama Railroad from Lax to Decatur, fourteen miles, has been let. Trains are running on the road from Fayette, Tenn., to Jeff, Ala., twelve miles from Lax, and is under construction between these points.

Clarksburg, W. Va.—About 2000 men are at work upon the construction of the West Virginia Short Line Railroad from Clarksburg to New Martinsville, a distance of fifty-nine miles.

Columbus, Ga.—The Central of Georgia Railway has let a contract for an extension of its line from Columbia, Ala., to Dothan, Ala., eighteen miles, to Hardaway, Jones & Co. Work will begin in thirty days.

Denison, Texas.—A surveying party has been organized for preliminary work on the Denison & Northern Railroad Co., projected to run from Denison through Oklahoma to Wichita, Kans.

Elizabeth City, N. C.—Surveys are under way for the Elizabeth City & Western Railroad.

Enterprise, Ala.—It is reported that surveyors are running a line for an extension of the Central of Georgia from Columbia, Ala., by way of Dothan and Geneva to Pensacola, Fla.

Fairfax C. H., Va.—Preliminary survey has been made for a railroad from Fairfax C. H. to the Chain Bridge across the Potomac above Washington. Mr. Joseph E. Willard is said to be interested in the undertaking.

Fort Worth, Texas.—The survey for the Fort Worth, Dallas & Gulf Railroad has been run from Dallas to Fort Worth.

Hawkinsville, Ga.—It is thought that construction of a railroad from Hawkinsville to Pitts, Ga., will begin shortly. Several miles of the road have already been graded.

La Grange, Ga.—Surveys are in progress for an extension of the Chattahoochee Valley Railroad from River View, its present terminus, to Columbus, Ga.

Leachville, Ark.—The Jonesboro, Lake City & Eastern Railroad has been completed from Jonesboro to Leachville, thirty-four miles, and it is said will be extended to a point on the Mississippi river, probably Osceola, twenty-four miles distant.

Little Rock, Ark.—The contract has been let for the construction of the Little Rock & Hot Springs Western Railroad between Little Rock and Benton, a distance of twenty-three miles. This is the final contract to be let.

Marion, S. C.—The survey of the Marlboro, Marion & Holly Railroad has been completed from Osborne, N. C., to Marlboro, fifty-one miles.

Natchitoches, La.—The Shreveport & Red River Valley Railway Co. is securing rights of way for an extension of its line from St. Maurice to Colfax.

Owensboro, Ky.—The Owensboro & Calhoun Interurban Railway Co. has been incorporated, with a capital stock of \$250,000, to build a standard-gauge electric railroad from Owensboro to Calhoun. Mr. J. D. Fredd is general manager.

Sabine, Texas.—It is reported that contracts will be let soon for the Sabine Harbor & Northern Railroad, running from Sabine to Port Arthur, fifteen miles.

Savannah, Ga.—The survey has been completed for an extension of the Savannah, Thunderbolt & Isle of Hope Railway to Warsaw Island, eleven and one-half miles.

Savannah, Ga.—The Central of Georgia Railroad will extend its track from River street to the Tybee depot, enabling the road to handle freight to and from Tybee over its own lines.

Standardsville, Va.—Greene county, Virginia, has voted for a \$15,000 subsidy for the building of a railroad by the Rockingham Railway, Mining & Manufacturing Co. from Gordonsville to Elkton, Va.

Vicksburg, Miss.—It is reported that financial arrangements have been completed for the building of a road seventy-four miles long from Monroe to Natchitoches.

Wartrace, Tenn.—Bonuses are sought in Bedford and Moore counties for the construction of an electric railway from Wartrace to Lynchburg, Tenn. Work is expected to begin on the road within a few weeks.

Wilmington, N. C.—It is announced that work on the proposed railroad between Wilmington and Shreveport, between thirty and thirty-five miles long, will begin November 1.

### Street Railways.

Atlanta, Ga.—It is announced that the Collins Park & Belt Railroad Co. intends to build its lines as promptly as material can be secured.

Columbia, S. C.—It is reported that \$50,000 will be spent improving the Columbia Electric Street Railway lines.

Huntsville, Ala.—Tracklaying has begun on the electric street railway line.

Kansas City, Mo.—The Metropolitan Street Railway Co. has asked for bids for the construction of a viaduct of steel and asphalt.

Kansas City, Mo.—The city council has passed ordinances granting three franchises for electric-line extensions to the Metropolitan Street Railway Co.

Newport News, Va.—The Peninsula Street Railway Co. has commenced the work of laying tracks from Old Point to Hampton, and the work will be pushed vigorously.

St. Louis, Mo.—The board of public improvements has approved plans for the reconstruction of the Citizens' Railway Co.'s tracks on Grand avenue to the fair grounds.

Wheeling, W. Va.—The Wheeling Railway Co. asks permission of the city council to build extensions of its lines in Wheeling.

## Machinery, Proposals and Supplies Wanted.

**Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The MANUFACTURERS' RECORD has received during the week the following particulars as to machinery that is wanted.**

Architects.—See "Cotton-mill Machinery." Bedstead Manufacturers.—J. J. Littlejohn & Co., Jonesville, S. C., wants to correspond with manufacturers of and dealers in iron bedsteads.

Belting.—See "Knitting Machines."

Boiler.—H. R. Booker, Hampton, Va., wants 100-horse-power second-hand boiler.

Boiler and Engine.—J. F. Kerner, Kernersville, N. C., wants to purchase boiler and engine.

Boiler and Engine.—J. S. Woods, Fredericksburg, Va., is in the market for a 30-horse-power steam engine and boiler.

Boilers and Engines.—Salem Iron Works, Salem, N. C., wants new or second-hand 40, 50 and 60-horse-power portable boilers on skids, to be delivered at once; 10-horse-power, 30-horse-power return tubular boilers and 25-horse-power detached engine, to run not more than 200 revolutions.

Bolt and Nut Manufacturers.—Daniel Bodden & Co., 81 St. George's place, Glasgow, Scotland, wants to correspond with manufacturers of bolts and nuts.

Brewery Machinery.—Galveston Brewing Co., B. H. Peters, general manager, Galveston, Texas, wants to purchase steam condensers, reboilers and filters.

Bricks.—Central Phosphate Co., J. Kromer, general manager, Mt. Pleasant, Tenn., is in need of about 100,000 hard common bricks.

Broom Machinery and Supplies.—H. C. Kenny, Athens, Ga., wants samples of broom tables and locks; also wants to correspond with manufacturers of broom machinery.

Building Material.—R. H. Sommerville, city treasurer, Montgomery, Ala., will receive proposals until September 6 for 200,000 hard bricks, 200 cubic yards of crushed granite or limestone, 250 barrels Portland cement, 550 barrels Louisville cement; specifications can be obtained of George A. Ellis, consulting engineer, at office of water works, 114 Monroe street. Proposals must be sealed and endorsed with title of material proposed to be furnished. Usual rights reserved.

Builders' Materials.—L. D. Stainback, Henderson, N. C., wants to correspond with manufacturers of metal ornaments for roof gables, porch, etc.; also sash, doors and blinds, porch columns, spindle staircases, etc.

Cableway.—C. F. Boyer, president Tennessee Lumber Canal Co., Maryville, Tenn., will want large quantity of wire rope for crossing river.

Cement.—See "Building Materials."

Conveying Machinery.—See "Cableway."

Corn Mill.—See "Flour Mill."

Cotton-mill Machinery.—W. A. West, Norwood, La., wants to correspond with manufacturers of cotton-mill machinery; also with a mill architect.

Cotton-mill Machinery.—W. E. Libby, Hammond, La., wants to correspond with manufacturers of cotton-mill machinery.

Cotton-mill Machinery.—Hogansville Manufacturing Co., Judson F. Mobley, secretary-treasurer, Hogansville, Ga., wants to purchase machinery for 5000-spindle duck mill.

Crusher.—Garrett Pumping Co., Corsicana, Texas, wants to procure a second-hand rock crusher of about forty tons daily capacity (Gates preferred).

Electrical Machinery.—Sullivan Hardware Co., Anderson, S. C., is in the market for a two-phase alternating current motor, two to five horse-power.

Electric-light Plant.—Bids are asked until September 12 for furnishing thirty or more 2000 or 1200-candle-power arc and forty or more 25-candle-power incandescent lights for five or ten years, the lamps to be on poles forty-five feet high; L. S. Williams, city clerk, Cynthiana, Ky.

Engine.—Allen & Currey, Shreveport, La., contemplate buying a stationary engine not less than fifty nor more than 100 horse-power.

Engine.—Thomas Bailey & Co., Athens, Ga., want a 50 to 80-horse-power second-hand engine.

Engine.—Rock Hill Buggy Co., Rock Hill, S. C., wants to purchase a 50-horse-power engine, and would like to have cuts and prices.

Flour Mill.—Collin County Mill & Elevator Co., McKinney, Texas, will want bids on machinery for 400-barrel flour mill and 200-barrel corn mill.

Flour-mill Machinery.—Hite & Greenwell, Waverly, Ky., want to correspond with manufacturers of flour-mill machinery.

Furniture.—Hayden, Wheeler & Schwend, Charlotte, N. C., want prices, designs, etc., on office furniture.

Glass Factory.—Lafayette Window Glass Corporation, care of Pine Grove Manufacturing, Land & Improvement Co., Clarksburg, W. Va., will need machinery for equipping a window-glass factory.

Harness Hardware.—J. L. Helms, Clifton Forge, Va., is in the market for calks and harness hardware.

Ice Machine.—Hugh Rolston, 57 St. Francis street, Mobile, Ala., is in the market for an absorption ice machine, six to ten tons.

Ice Machinery.—J. T. Medlin, Cheraw, S. C., wants to correspond with manufacturers of ice machinery; also with parties having a second-hand 10 to 15-ton plant for sale.

Ice Machinery.—I. E. McGehee, Erwin, Miss., wants to correspond with manufacturers of ice machinery.

Implement-factory Supplies.—J. P. Chapman, care of The Belmont, Basic City, Va., will need bar iron, pig iron, lumber, coal, coke, oils, etc., for operating agricultural-implement factory.

Jetty Work.—Sealed bids in triplicate for improving mouth of Brazos river, Texas, by repairing jetties and otherwise, will be received until September 20 at U. S. Engineer Office, Galveston, Texas. For information apply to C. S. Rice, captain, engineers.

Kindling-wood Mill.—See "Saw-mill Equipment."

Knitting Machines.—The J. H. Waters Co., Sellersburg, Ind., wants prices on twenty-five automatic knitting machines, with all auxiliary machinery, including loopers, topers, press, boards, shafting, belting, pulleys and everything complete except power.

Laundry Equipment.—City Steam Laundry, Bonham, Texas, will need a No. 9 ironer.

Laundry Machinery.—J. H. Barnett, East Radford, Va., desires prices on steam-laundry machinery and fixtures.

Machine-shop Equipment.—On October 10 bids will be opened for machinery and tools to be installed in the new machine shop now in course of erection at the New York Navy Yard, Brooklyn, N. Y. Proposal blanks and full information, together with official list of specifications of the machinery and tools, can be obtained on application. The machines wanted will be 160 in number, and a set of twenty-eight hydraulic jacks, etc. Address Bureau of Supplies and Accounts, Navy Department, Washington, D. C.

Machine Tools.—Thomas H. Johnson, Chattanooga, Tenn., wants to purchase a new or second-hand pipe machine for cut-



ding and threading pipe up to and including twelve inches.

Machine Tools.—C. B. Saxton, Greensboro, N. C., is in the market for a 200-pound drop hammer, punch and shear, small plain mill-machine, bolt header, sensitive drill, small planer and 16-inch lathe and polishing lathe.

Machine Tools.—Florence Machine Works, Florence, Ala., is in the market for medium-sized second-hand steam hammer; also one six-foot boring mill.

Machine Tools.—Sullivan Hardware Co., Anderson, S. C., is in the market for a power pipe-cutting and threading machine to cut and thread one-quarter inch to two-inch pipe, complete with bolt and nut attachment, nut tops one inch, one and one-eighth inches and one and one-quarter inches, and a set of nipple sockets one-quarter inch to two inches.

Metal Workers.—See "Builders' Materials."

Mining Equipment.—Orville H. Hall, 11 Cone street, Atlanta, Ga., wants to know what machinery or appliance is needed to operate a salt mine producing from two to five tons common salt per diem, cost of machinery, cost of operating it per diem and probable life of machinery wanted.

Mining Equipment.—S. B. Mosby, P. O. Box 175, Roanoke, Va., is in the market for two ore-washers.

Mining Machinery.—American Lead & Zinc Mining Co., Thos. W. Johnson, president, Harrison, Ark., will want to purchase machinery for development of lead and zinc mines.

Peanut-picker.—H. W. Humphrey, Richards, N. C., wants a peanut-picker of about three horse-power; capacity seventy-five or 100 bushels per day.

Piping.—J. P. Chapman, The Belmont, Basic City, Va., will need gas pipes.

Piping.—Central Phosphate Co., Mt. Pleasant, Tenn., is in need of 750 feet cast-iron pipes, six inches diameter and five to ten feet long, to be used for rain pipes; 200 cast-iron pipes, five feet long, four inches diameter, very thin, without hubs, for hot air; sundry iron pipes and pipe fittings for steam and water, one inch, two inches, four and one-half inches, three inches, four inches, five inches and six inches diameter.

Railway Equipment.—S. B. Mosby, P. O. Box 175, Roanoke, Va., is in the market for about three miles of light-weight narrow-gauge relaying rails.

Railway Equipment.—William H. Richardson, Summerville, S. C., wants a small locomotive to run on wooden rails.

Railway Equipment.—Hyde Bros. & Co., 902 and 903 Lewis Building, Pittsburg, Pa., want to buy relaying rails of any section or quantity.

Saw-mill Equipment.—Julius D. Koster, Key Box No. 16, Charleston, S. C., desires to install machinery that will saw, split and tie up in small bundles one carload or more of fat pine kindling wood per day; has power and wants only machinery.

Saw Mills.—C. F. Boyer, president Tennessee Lumber Canal Co., Maryville, Tenn., wants to purchase some saw mills of 10,000 feet per day capacity.

Sewerage.—The city of Newnan, Ga., wishes to employ an engineer for its \$20,000 sewerage system, and will open proposals September 6. References of skill and ability required. Address W. P. Nimmons, clerk.

Sewer and Concrete Work.—Sealed proposals will be received at office board of public works, Chattanooga, Tenn., until September 5 for building the extension of the Washington-street sewer a distance of 1640 feet. This proposed extension will be of brick, egg-shape in form and 50x75 inches internal dimensions. Forms for proposals and specifications may be obtained, also plans and specifications may be seen. Envelopes containing the bids should be indorsed "Proposal for building Washington-street sewer extension." Sealed proposals will also be received until the same date and hour for the construction of about 2500 square yards concrete foundation on Market street between Sixth and Ninth streets. Specifications furnished on application. Usual rights reserved; Sam Erwin, chairman.

Shafting and Pulleys.—See "Knitting Machines."

Shuttle-block Plant.—See "Woodworking Machinery."

Steam Specialties.—See "Brewery Machinery."

Tank.—Dawson Oil Co., Dawson, Ga., is in the market for one sheet-iron or steel tank to hold 5000 or 6000 gallons, delivered.

Tanks.—Yarborough & Beilinger, College

and Third streets, Charlotte, N. C., is in the market for a tallow-rendering tank.

Tobacco Machinery.—Maryland Cigarette Co., J. W. Hargrave, president, 1610 Camden street, Baltimore, Md., wants to correspond with manufacturers of tobacco machinery.

Water Works.—Proposals will be opened September 12 for furnishing cast-iron pipe and specials, valves, hydrants and laying same in connection with proposed water works. Check for \$300 must accompany bid. Specifications, forms of proposal, etc., furnished on application to T. S. Thompson, recorder, Berryville, Va.

Water Works.—Sealed bids will be received until September 1 for the construction of a water supply for the Tuxedo & Emba Park Water Works Co., including standpipe and all appurtenances. Plans and specifications can be seen, or full information obtained by addressing J. C. McKennie, Nos. 401 and 402 Herald Building, Baltimore, Md.; D. C. Adelsberger, consulting engineer.

Well-drilling.—Bids will be received by the commissioners' court of Grimes county, Texas, until September 1 for boring an artesian well at Anderson, Texas. Usual rights reserved; J. H. Teague, county judge.

Wire-working Machinery.—M. G. Pettet, Searcy, Ark., wants to correspond with manufacturers of wire-working machinery.

Woodworking Machinery.—J. W. Spoles, Greenwood, S. C., is in the market for hardwood machinery, and wants prices on shuttle-block plant.

Woodworking Machinery.—William E. Steadman, Columbia, S. C., wants a second-hand self-feeding saw table.

Woodworking Machinery.—High Point Furniture Co., High Point, N. C., is in the market for new or second-hand (Dodd) dovetailing machine and one (Benedict) bed clamp.

Woodworking Manufacturers.—See "Builders' Materials."

## TRADE NOTES.

Window-Cleaner Patented.—Mrs. O. Hilleken, 535 Wythe avenue, Brooklyn, N. C., is offering for sale the entire right in a patented window-cleaner. (See advertisement.)

Hyde Water-Tube Boiler.—Messrs. Hyde Brothers & Co. of Pittsburg have just sold a 150-horse-power Hyde water-tube boiler to Moorhead, Brother & Co. of Sharpsburg, N. Y. This is the third order obtained from this firm.

Manufacturing Sites South.—Frequently there are offered opportunities to obtain excellent manufacturing sites in the South at most reasonable figures. Such an opportunity is now offered by Neville B. Craig, or Jas. W. Drape & Co., of 425 Fourth avenue, Pittsburg, Pa. (See advertisement.)

Flour Mills.—A large share of the new contracts for flouring-mill machinery is secured by the Wolf Company of Chambersburg, Pa. Recent contracts filed by this corporation include a 30-barrel gyrator mill in West Virginia, 75-barrel mill in Pennsylvania, replacing old sieve machines with the gyrator, 40-barrel mill complete in Tennessee and 60-barrel mill in South Carolina.

A Test of American Stoker.—A recent test made at the Chestnut Hill pumping station, Metropolitan water board, Boston, which holds the world's record for pumping one gallon of water at less cost per pound of coal consumed than any other pumping station, shows that the adoption of the American stoker has decreased the cost fully 10 per cent., the new record being 1422.2 gallons of water pumped per pound of coal. The American Stoker Co. of New York makes this stoker.

Praising a Heating and Ventilating System.—Seven of the most prominent industrial establishments of this country have lately written to the Buffalo (N. Y.) Forge Co. recommending very highly that company's system of heating and ventilating as installed in shops, etc. The seven establishments referred to were the Peoria & Eastern Railway, Lozier Manufacturing Co., Sherwin-Williams Co., Wyman, Partridge & Co., Brooks Locomotive Works, Lodge & Shipley Machine Tool Co., Bullock Electric Co.

Yarn-Baling Presses in Southern Mills.—The many new cotton mills under construction throughout the South are to have the most modern equipment obtainable. Included in the equipment of the most up-to-date plants is the yarn-baling press manufactured by the Boomer & Boschert Press Co. of Syracuse, N. Y. This company's new-

style steel-frame yarn-baling press has lately been ordered by the Willingham Cotton Mills, Macon, Ga.; Lula Manufacturing Co., Kings Mountain, N. C.; Long Shoals Cotton Mills, Lincolnton, N. C., and the Tremont & Suffolk Mills of Lowell, Mass., has placed second order for large iron baling press.

Flour-Mill Machinery.—The continued activity in the erection of new flour mills and the improvement of established plants affords the manufacturers of milling machinery many orders. One of the prominent milling machinery makers is the Nordyke & Marmon Co. of Indianapolis, Ind., which markets the celebrated swing-sifter system. Some of this company's lately-filed orders may be mentioned. One was for complete 30-barrel mill in Colombia, South America; for complete 100-barrel mill in Leeds, N. D.; for complete 100-barrel mill in De Lamere, N. D.; for a swing sifter in Waverly, New Zealand; for swing sifters, double-roller mills, dust collectors, bran dusters, etc., in all parts of the United States. The company also shipped a lot of rice-milling machinery to Celaya, Mexico.

Southern Electrical Engineering.—In the rapid progress of the electrical industry the South is taking its full share of activity. Electric-lighting and power plants are being established throughout the section by both private and public institutions, and some of the leading electrical concerns of the country have their habitation in the Southern States. One of the prominent Southern companies is the Electrical Engineering Co. of Charlotte, N. C., of which Mr. S. J. Smith is engineer, and it contracts for mill and town lighting, supplies complete equipments, repairs, supplies, winds armatures, etc. For the armature winding an expert of experience has been secured from the Crocker-Wheeler factory. Many good contracts are constantly being secured by this firm, its most recent one being a 500-volt plant in Charlotte, N. C.

Coaling at Sea.—The Lidgerwood Manufacturing Co. of New York, whose hoisting engines and cableways are well known, has constructed a special form of cableway adapted for coaling vessels at sea, in which the Navy Department has shown considerable interest. The collier Marcellus is to be equipped with one of these sea-coaling cableways, and a board of naval officers will test device. The work of the installation will be under the direction of Naval Commander Bowles. In this device the warship may take the collier in tow, or the collier may take the warship in tow, leaving a space between the ships of 300 feet. Elevated cables, leading from the masthead of the collier to sheer poles on the warship, serve to support and propel a carriage, from which hangs bags of coal. The coal is elevated from the deck of the collier, transferred to the carriage at the masthead and propelled across the intervening space at a speed of 1000 feet per minute. The arrangement for compensating for the lurching of the vessel in seaway is exceedingly ingenious, and, having been tested on a small scale, leaves little doubt as to the working of the appliance at sea. Coaling can be carried on while the ships are moving ahead.

## TRADE LITERATURE.

A New Express Company.—Probably the most recent arrival in the express forwarding field is the International Express Co. of 52 Broadway, New York city. This corporation has completed its arrangements for general forwarding to all parts of the world, and has issued an elegant linen-backed map of the two hemispheres, with lines showing its route throughout the world by means of the railroads and steamships.

Asphalt Roofing, Calendered Roofing Felts, etc.—Descriptive catalogues have been issued by the northwest department of the Cambria Steel Co. of Johnstown and Pittsburg, Pa. Pure asphalt roofing is treated of as one of the company's products in a pamphlet of interest to all users of roofing, contractors and others. Another pamphlet tells of the advantages of the calendered roofing felts and ready roofings made by the company.

Acetylene-Gas Apparatus and Accessories. There is an increasing demand for acetylene-gas apparatus as the light makes its way into wide use. In seeking apparatus for the generation of this modern gas, it is well to investigate that manufactured by the responsible manufacturers. One of these is the firm of Messrs. J. B. Colt & Co. of 3, 5 and 7 West Twenty-ninth street, New York city, manufacturing under the patents of the Acetylene Apparatus Manufacturing Co. of 141 Broadway, New York. Write for booklets.

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Single Fare to Baltimore and Return via Pennsylvania Railroad, Account Presentation of Sword to Captain Dyer of the U. S. S. "Baltimore."	
For the occasion of the presentation, on September 12, 1899, of a sword of honor to Captain Dyer of the United States cruiser "Baltimore" for his heroic action in the Battle of Manila, the Pennsylvania Railroad Co. will sell special excursion tickets from stations on its line in the States of Maryland, Delaware, the District of Columbia and the State of Pennsylvania as far north as York, to Baltimore, at rate of single fare for the round trip (minimum rate, fifty cents). Tickets will be sold September 11 and 12, and will be good to return until September 13, inclusive.	
Electrical Exhibition, Wilmington, Del. Reduced Rates via Pennsylvania Railroad.	
For the Electrical Exhibition, to be held at Wilmington, Del., September 4 to 9, 1899, the Pennsylvania Railroad Co. will sell on September 6 excursion tickets to Wilmington and return, good only on that day, at a single fare for the round trip, from points on the Maryland Central and Delaware divisions of the Philadelphia, Wilmington & Baltimore Railroad. No tickets will be sold at a less rate than twenty-five cents.	
For further information apply to ticket agents.	



# SOUTHERN RAILWAY COMPANY.

FIFTH ANNUAL REPORT FOR THE YEAR ENDED JUNE 30, 1899.

New York, August 18, 1899.

To the Stockholders of the Southern Railway Company:

The President and Board of Directors submit the following report of the operations of the Company for the year ended June 30, 1899:

INCOME ACCOUNT.			
	1899.	1898.	Increase.
Gross earnings from operations.....	\$25,353,696 07	\$21,005,838 75	\$4,257,847 32
Operating expenses and taxes.....	17,356,355 37	14,501,864 44	2,854,490 93
Net earnings from operations.....	\$7,997,330 70	\$6,503,974 31	\$1,493,356 39
Income from other sources.....	328,460 81	348,378 08	*19,908 27
	\$8,325,800 51	\$6,942,352 39	\$1,383,448 12
Interest and rentals.....	\$6,207,252 80	\$5,862,767 89	\$344,484 91
Other deductions from income.....	24,028 23	72,571 41	*48,543 18
	\$6,231,281 03	\$5,935,339 30	\$295,941 73
Balance carried to credit of profit and loss..	\$2,094,519 48	\$1,007,013 09	\$1,087,506 39

(For details see Table 2.)

This account for 1899 includes the results of operation of the Memphis Division for the entire year as against four months' operations of that property in the previous year. It also includes the results of operation of the several properties added to the system during the year 1899, as follows:

Mobile & Birmingham Railroad, March 1 to June 30, 1899.	148.55 miles.
South Carolina & Georgia Railroad and Augusta Southern Railroad, May 1 to June 30, 1899.	323.20 "
Carolina Midland Railway and Selvern & Knoxville Railroad, May 21 to June 30, 1899.	71.58 "
Atlantic & Yadkin Railway, April 1 to June 30, 1899.	166.22 "
Aiken Branch (formerly Carolina & Cumberland Gap Railway), April 1 to June 30, 1899.	23.58 "
North Carolina Midland Railway—extension from Mocksville, N. C., to Mooresville, N. C., April 1 to June 30, 1899.	27.47 "
Sundry small additions.....	5.57 "
Less lines discontinued.....	39.16 "
	727.01 "

An analysis of the earnings and expenses in detail in comparison with those of substantially the same properties in the previous year will be found in the report of the General Manager.

The net increase of \$344,484.91 in "Interest and Rentals" consists of:	
Increase in interest upon Southern Railway Consolidated Bonds.....	\$50,000 00
Increase in interest upon Southern Railway East Tennessee Reorganization Bonds, due to increase in rate, on March 1, 1898, from four per cent. to five per cent.....	30,000 00
Increase in interest upon Memphis Division First Mortgage Four Per Cent. Bonds, paid for the entire year 1898-99, as against six months in the previous year.....	101,660 00
Increase in interest upon Columbia & Greenville First Mortgage Bonds, due to increase in rate, on January 1, 1898, from five per cent. to six per cent.....	10,000 00
Increase in interest upon Georgia Pacific First Mortgage Bonds, due to increase in rate, on January 1, 1898, from five per cent. to six per cent.....	28,000 00
Net increase in interest on Southern Railway Company Certificates of Indebtedness issued in December, 1897, for account of the purchase of Memphis Division, of which \$600,000 out of the original issue of \$1,200,000 were outstanding June 30, 1899, interest having been paid for the entire year 1898-99, as against six months of the previous year.....	15,399 99
Interest for twelve months ended June 30, 1899, on Aiken Branch First Mortgage Four Per Cent. Bonds, issued for the purchase of the Carolina & Cumberland Gap Railway.....	6,000 00
Interest, April 1, 1899, to June 30, 1899, on \$1,500,000 Atlantic & Yadkin Railway Company First Mortgage Four Per Cent. Bonds.....	15,000 00
Interest from May 15 to June 30, 1899, on \$2,000,000 Southern Railway Company Certificates of Indebtedness issued and sold, to provide, in part, for the purchase of South Carolina & Georgia Railroad stock and Northern Alabama Railway bonds and stock, and from May 19 to June 30, 1899, on \$250,000 Southern Railway Company Certificates of Indebtedness issued and sold to provide, in part, for the purchase of bonds and stock of the Carolina Midland Railway Co. and stock of the Selvern & Knoxville Railroad Co.....	15,145 82
Rental of the Mobile & Birmingham Railroad for four months, March 1 to June 30, 1899.....	26,000 00
Rental of the South Carolina & Georgia and Augusta Southern railroads for two months, May 1 to June 30, 1899.....	47,083 23
Rental of Richmond & Mecklenburg Railroad for eight months, November 1, 1898, to June 30, 1899.....	8,400 00
Sundry small increases.....	639 94
Total increases.....	\$353,329 08
Miscellaneous decreases, due chiefly to retirement of Richmond & Danville and Georgia Pacific Equipment Sinking Fund Bonds.....	8,844 17
Net increase.....	\$344,484 91

The increase of \$50,000 in interest upon Southern Railway Consolidated Bonds was due:

(a) To the fact that \$1,000,000 of bonds which bore interest for only six months of the fiscal year 1898 carried interest for entire year 1899, involving an increase of..... \$25,000 00

(b) To the sale during the year of \$1,000,000 of bonds, bearing interest from January 1, 1899, six months..... 25,000 00

Consolidated Bonds reserved in the hands of the Trustee for future improvements amounted, at the close of the year, to \$13,900,000, issuable only for expenditures for new and additional property under the limitations specified in the mortgage, and at a rate not exceeding \$2,000,000 in any one calendar year.

One million dollars have been withdrawn during the year 1899, as stated below. It is not expected that further withdrawals will be made this year.

Memphis Division First Mortgage Bonds similarly reserved for improvements upon the Memphis Division amount to \$1,417,000, to be issued at a rate not exceeding \$100,000 per annum; and, in addition thereto, \$1,500,000 of these bonds are reserved solely for the construction, if determined upon, of a line of railway between Stevenson and Chattanooga. None of the reserved bonds of this issue has as yet been withdrawn from the Trustee.

There are also reserved, in the hands of the Trustee, \$1,000,000 of Memphis Division Second Mortgage Bonds, issuable for improvements on the Memphis Division, at a rate not exceeding \$100,000 per annum. None of the reserved bonds of this issue have as yet been withdrawn from the Trustee.

## DIVIDENDS AND PROFIT AND LOSS ACCOUNT.

A dividend of one per cent. upon the then outstanding Preferred Stock was paid on January 20, 1899.

The amount required for an additional dividend of one per cent. upon the Preferred Stock has been charged to Profit and Loss as of June 30, 1899, and the amount has been reserved to pay such dividend in October next.

The balance standing at credit of Profit and Loss on June 30, 1898, was..... \$1,454,951 72

The balance standing at the credit of that account on June 30, 1899, after deducting dividends, as above, was..... 2,366,563 88

For further details of Profit and Loss Account see Table 3.

## FINANCIAL CONDITION.

The financial condition of the Company at the close of the year is shown in the comparative balance sheet (Table 1).

The Company has no floating debt, and has had none since its organization.

The liabilities of every character of all subordinate companies operated as a part of the system, whether leased or owned, are shown in the balance sheet, and are treated as liabilities of this Company.

Capital Stock:

Preferred Stock to the amount of \$2,700,000, par value, was issued and sold during the year to provide, in part, for the purchase of Capital Stock of the South Carolina & Georgia Railroad Co.

This completes the authorized issue of \$60,000,000 of Preferred Stock.

There has been no change during the year in the amount of Common Stock outstanding.

Funded Debt, Outstanding Securities of Leasehold Estates and Equipment Notes:

As stated in the last annual report, there were outstanding on June 30, 1898:

Funded Debt (including \$945,000 Southern Railway Consolidated Bonds free

owned by the Company)..... \$101,236,000 00

Outstanding Securities of Leasehold Estates..... 12,850,000 00

Equipment Notes..... 202,817 76

Total..... \$114,288,817 76

On June 30, 1899, as shown by the balance sheet (Table 1), there were outstanding:

Funded Debt (including \$1,394,000 Southern Railway Consolidated Bonds free in Treasury and \$1,500,000 Memphis Division Second Mortgage Bonds owned by the Company).....	\$103,932,300 00
Outstanding Securities of Leasehold Estates.....	21,508,000 00
Equipment Notes.....	239,991 63
Total.....	\$125,680,291 63

Net increase during the year in these three accounts..... \$11,391,473 87

This net increase of \$11,391,473.87 represents:

Additions During Year:

(a) New Issues:

Southern Railway Co. Consolidated Bonds..... \$1,220,000 00

Issued as follows:

Upon retirement of an equal amount of Equipment Bonds and Equipment Trust obligations of the old Companies and of their Receivers..... \$216,000 00

Upon the retirement of an equal amount of Prior Lien Bonds redeemed, viz.:

Charlotteville & Rapidan First Mortgage Bonds..... 13,000 00

Issued during the year for account of the acquisition of new property..... 1,000,000 00

Total..... \$1,220,000 00

Southern Railway Co. Aiken Branch, First Mortgage Four Per Cent. Bonds, issued for the purchase of the Carolina & Cumberland Gap Railway..... 150,000 00

Atlantic & Yadkin Railway First Mortgage Four Per Cent. Bonds, issued April 15, 1899, guaranteed, principal and interest, by Southern Railway Co. 1,500,000 00

(b) Securities of Leasehold Estates:

Bonds of South Carolina & Georgia and Augusta Southern Railroad Companies:

S. C. & G. First Mortgage Five Per Cent..... \$5,250,000 00

Augusta Southern First Mortgage Five Per Cent..... 400,000 00

Equipment Trust Notes of South Carolina & Georgia and Augusta Southern Railroad Companies:

S. C. & G. R. R..... \$114,478 14

Augusta Southern Railroad..... 9,307 78

Richmond & Mecklenburg Railroad Co. First Mortgage Four Per Cent. Bonds, dated November 1, 1898..... 308,000 00

Securities of Mobile & Birmingham Railroad Co.:

Prior Lien Bonds, Five Per Cent..... \$600,000 00

First Mortgage Bonds, Four Per Cent..... 1,200,000 00

Preferred Stock..... 900,000 00

Total additions..... \$11,680,785 92

Reductions During Year:

Richmond & Danville Equipment Sinking Fund Five Per Cent. Bonds, retired..... \$94,000 00

Georgia Pacific Equipment Sinking Fund Five Per Cent. Bonds, retired..... 75,000 00

Charlotteville & Rapidan First Mortgage Six Per Cent. Bonds, retired..... 13,700 00

Equipment Notes paid..... 86,612 05

Total reductions..... 269,312 05

Net increase in these three accounts as above..... \$11,391,473 87

The increase in securities outstanding, as shown above, is fully represented either by the amount of Prior Lien Securities retired, or by the cost of new property acquired, or by securities outstanding upon newly acquired properties.

Certificates of Indebtedness:

Of the Certificates of Indebtedness issued in December, 1897, on account of the Memphis Division, \$400,000 were paid during the year, leaving outstanding at the close of the year the sum of \$600,000.

There were issued during the year, to provide in part for the purchase of stock of the South Carolina & Georgia Railroad Co. and of the Selvern & Knoxville Railroad Co., and of stock and bonds of the Northern Alabama Railway Co. and of the Carolina Midland Railway Co., Certificates of Indebtedness in the sum of \$2,350,000, bearing interest at the rate of five per cent. per annum.

Two million dollars of these certificates are payable in eight (8) semi-annual instalments, and \$350,000 in three (3) semi-annual instalments, with the right to the Company in respect to each of these issues to pay all or any part thereof upon the due date of any one certificate.

These certificates were issued to avoid the creation of floating debt, and to fund for short periods the amounts expended for the properties named, with a view to permanent funding at lower rates of interest at or before maturity of the certificates.

Equipment Trust and Equipment Sinking Fund Payments:

Equipment Trust Notes have been paid during the year as follows:

Richmond & Danville Car Trust Notes..... \$8,200 00

East Tennessee, Virginia & Georgia Car Trust Notes..... 37,500 00

Memphis & Charleston Car Trust Notes..... 24,479 04

South Carolina & Georgia Car Trust Notes..... 14,249 57

Augusta Southern Car Trust Notes..... 2,183 44

Total..... \$86,612 05

Outstanding Equipment Trust Notes at the close of the year, after making the above payments, amount to \$239,991.63, as follows:

East Tennessee, Virginia & Georgia Car Trust Notes..... \$100,000 00

Memphis & Charleston Car Trust Notes..... 32,638 72

South Carolina & Georgia Car Trust Notes..... 100,228 87

Augusta Southern Car Trust Notes..... 7,124 34

Total..... \$239,991 63

Sinking Fund payments during the year, on account of Equipment Bonds, have been:

Richmond & Danville Five Per Cent. Equipment Sinking Fund..... \$98,555 00

Georgia Pacific Five Per Cent. Equipment Sinking Fund..... 100,645 00

Total..... \$199,200 00

Charges to Capital Account:

(a) For New Construction and Real Estate:

Expenditures for New Construction and Real Estate charged to capital account during the year have been (see Balance Sheet, Table 1, "Current New Construction, Year 1898-99"):

Real Estate at Birmingham, Ala..... \$99,800 00

Real Estate at Washington, D. C..... 20,934 25

Real Estate at Louisville, Ky..... 26,505 17

Real Estate at Rome, Ga..... 10,562 35

Real Estate at Columbia, S. C..... 9,750 00

Real Estate at Lynchburg, Va..... 3,500 00

Real Estate—Miscellaneous..... 4,852 63

Terminal improvements at Pinner's Point, Va..... 28,983 30

Terminal improvements at Brunswick, Ga..... 14,931 11

Terminal tracks and property at Louisville, Ky..... 13,470 51

For completion of construction of branch railroad from Leeds, Ala. (near Birmingham), to Iron-ore mines..... 14,000 64

For account of construction of Chattanooga-Stevenson line..... 5,005 00

Additional passing tracks and tracks to industrial plants, 210,091 feet..... \$140,384 76

Less amount charged to operating expenses, representing 49,751 feet of track taken up..... 35,284 26

Balance representing cost of 160,340 feet of additional track..... 105,100 50

Less amount transferred from Construction Account and charged to operating expenses..... 8,000 00

Total for construction and real estate..... \$349,986 46

The policy has been rigidly adhered to of charging to Capital Account only such expenditures as represent the cost of new and additional property.

All betterments to properties previously owned have been charged to operating expenses.

(b) For New and Additional Equipment:

Expenditures for new and additional equipment, charged to Capital Account, during the year (as shown by the balance sheet, Table 1, "New and Additional Equipment, Year 1898-99"), have been \$485,299.38, representing the cost of:

Equipment purchased or built costing..... \$175,771 00

viz.:

Seven Passenger Cars..... One Steam Towboat,

Sixty-seven Freight Cars..... Fifty Coal Boats,

Air-brake and automatic-coupler equipment costing..... 300,528 38

for cars not previously so equipped, viz.:

Air Brakes for 4985 Freight Cars.....

Automatic Couplers for 1506 Freight Cars.....

Total for equipment..... 485,299 38

Total charges to Capital Account during the year for construction, real estate and equipment..... \$835,284 94



ing:

2,300 00

3,000 00

9,901 03

2,291 63

1,473 87

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3,785 92

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Equipment on Hand June 30, 1899:  
As shown in Table 21, the equipment of all lines at the close of the year consisted of:  
764 Locomotives, 23,912 Cars, Freight Equipment,  
882 Cars, Passenger Equipment, 446 Cars, Road-Service Equipment.  
This includes equipment received with the Carolina & Cumberland Gap Railway, viz.:  
2 Locomotives, 10 Cars, Freight Equipment;  
2 Cars, Passenger Equipment,  
with the Mobile & Birmingham Railroad, viz.:  
13 Locomotives, 333 Cars, Freight Equipment,  
13 Cars, Passenger Equipment, 13 Cars, Road-Service Equipment;  
with South Carolina & Georgia Railroad, viz.:  
44 Locomotives, 1142 Cars, Freight Equipment,  
52 Cars, Passenger Equipment, 22 Cars, Road-Service Equipment;  
with Carolina Midland Railroad, viz.:  
3 Locomotives, 24 Cars, Freight Equipment;  
4 Cars, Passenger Equipment,  
and with the Atlantic & Yadkin Railroad, viz.:  
14 Locomotives, 296 Cars, Freight Equipment,  
11 Cars, Passenger Equipment, 3 Cars, Road-Service Equipment.  
Floating equipment owned by the Company at the close of the year consisted of two  
Steam Tugs, one Towboat, fifty-seven Barges, twenty-eight Coal Boats and one Pump Boat.  
New equipment, costing \$797,329.76, has been purchased during the year and charged  
to operating expenses, viz.:  
15 Locomotives, 1288 Freight Cars,  
6 Passenger Cars.

The new equipment thus charged to "Operating Expenses" has fully provided for the  
replacement of all equipment retired, and for all depreciation in equipment during the year.

Additional Properties Acquired:  
South Carolina & Georgia Railroad:  
In April, 1899, the Southern Railway Co. acquired, by purchase, a large majority of the  
capital stock of the South Carolina & Georgia Railroad Co., and leased the property of that  
company for a term of thirty years, effective April 29, 1899.

The Southern Railway Co. makes no guarantee under the terms of the lease, but agrees  
to pay to the shareholders of the South Carolina & Georgia Railroad Co. the net income  
from the operations of the property, after deducting operating expenses and taxes, expenses  
for betterments, interest on South Carolina & Georgia Bonds and rental of Augusta  
Southern Railroad.

The results of operation under said lease for the months of May and June, 1899, are  
included in those of the Southern Railway Co.

Northern Alabama Railway:  
In April, 1899, the Southern Railway Co. acquired, by purchase, a large majority of  
both the bonds and capital stock of the Northern Alabama Railway Co.

The Northern Alabama Railway consists of a line 95.56 miles in length, from Sheffield,  
Ala. (where it connects with the Memphis Division of the Southern Railway Co.), to  
Parish, Ala. (where it connects with this Company's Birmingham-Greenville line), and of  
branches aggregating 22.18 miles in length.

This property is operated under its own officers separately from the Southern Railway  
system, and the results from its operation are not included in those of the Southern  
Railway Co.

Atlantic & Yadkin Railroad:  
The purchasers at the foreclosure sale of the property of the Cape Fear & Yadkin  
Valley Railroad Co. reorganized that property in February, 1899, under the name of the  
"Atlantic & Yadkin Railroad Co." Subsequently that Company sold to the Wilmington &  
Weldon Railroad Co. that portion of the railroad thus acquired situated east and south of  
Sanford, N. C., together with one-half of the equipment acquired at said sale. In May,  
1899, the Southern Railway Co. acquired, by purchase, all of the securities of the Atlantic  
& Yadkin Railroad Co., consisting of \$1,500,000 First Mortgage Four Per Cent. Bonds, and  
\$1,000,000 par value, capital stock. The \$1,500,000 of bonds were thereupon guaranteed,  
principal and interest, by the Southern Railway Co., and were sold in May, 1899, to re-  
purchase the Company, in part, for the cost of said securities, leaving all of the capital stock  
of the Atlantic & Yadkin Railroad Co. in the treasury of this Company.

The Atlantic & Yadkin Railroad consists of about 131 miles of main line between San-  
ford, N. C., and Mount Airy, N. C., and about thirty-five miles of branch lines connecting  
therewith.

The income from this property is included in that of the Southern Railway Co. from  
April 1 to June 30, 1899.

Carolina Midland Railway and Seavern & Knoxville Railroad:  
In May, 1899, the Southern Railway Co. acquired, by purchase, substantially all of the  
securities of the Carolina Midland Railway Co. and the Seavern & Knoxville Railroad Co.  
The property of these Companies consists of 71.58 miles of railroad between Batesburg,  
S. C. (where it forms a junction with the Columbia-Augusta line of the Southern Railway),  
and Allendale, S. C. (where it connects with the Charleston & Western Carolina Railway).

The results of operation of these properties are included in those of the Southern Rail-  
way Co. from May 21 to June 30, 1899.

Carolina & Cumberland Gap Railway:  
The property of the Carolina & Cumberland Gap Railway, which, as stated in the  
last Annual Report, was leased on July 1, 1898, was, on September 1, 1898, purchased by  
the Southern Railway Co., and there were issued on account of said purchase \$150,000 of  
Southern Railway Co., Aiken Branch, First Mortgage Four Per Cent. Bonds. The interest  
on these bonds is substantially the same in amount as the rental under the lease.

Mobile & Birmingham Railroad:  
The property of the Mobile & Birmingham Railroad Co. was leased on March 1, 1899,  
to the Southern Railway Co. for ninety-nine years, at an annual rental equal in amount  
to the interest upon the outstanding bonds of the Mobile & Birmingham Railroad Co., viz.:  
\$600,000 Prior Lien Five Per Cent. Bonds, and \$1,200,000 General Mortgage Four Per Cent.  
Bonds, and dividends on the \$900,000 of outstanding Preferred Stock of that Company at  
the rate of one per cent. for the year ended June 30, 1900, two per cent. in the year ended  
June 30, 1901, three per cent. in the year ended June 30, 1902, and four per cent. per annum  
thereafter. The amount of rental for the year ending June 30, 1900, will be \$87,000, and  
will increase for three years thereafter at the rate of \$9000 per annum, reaching the  
maximum rental of \$114,000 per annum in the year ending June 30, 1903.

The Mobile & Birmingham Railroad extends from Mobile, Ala., to a junction point with  
the Southern Railway at Marion Junction, Ala., a distance of 148.55 miles. The results of  
operation under the lease for the period from March 1 to June 30, 1899, are included in  
those of the Southern Railway Co.

Richmond & Mecklenburg Railroad:  
The Richmond & Mecklenburg Railroad, which had previously been operated under a  
traffic contract, dated June 30, 1894, was leased, on November 1, 1898, for a period of fifty  
years, at an annual rental equal to four per cent. upon the maximum amount of \$315,000  
of Richmond & Mecklenburg First Mortgage Bonds, substantially all of the holders of the  
\$315,000 of Richmond & Mecklenburg First Mortgage Six Per Cent. Bonds agreeing to ex-  
change their bonds for new four per cent. bonds, in consideration of the making of the  
lease by the Southern Railway Co.

Birmingham Southern Railroad:  
In June, 1899, the Southern Railway Co. acquired, by purchase, from the Tennessee  
Coal, Iron & Railroad Co., one-half of the entire capital stock of the Birmingham Southern  
Railroad Co., viz.: \$300,000, par value, of the Preferred Stock, and \$300,000, par value,  
of the Common Stock, the remaining one-half interest having been, at the same time, pur-  
chased by the Louisville & Nashville Railroad Co.

The property of the Birmingham Southern Railroad Co. comprises all of the yards,  
sidings and other railroad properties formerly owned by the Tennessee Coal, Iron & Rail-  
road Co. in and near Birmingham, Ala., embracing necessary real estate, rights of way  
and about seventy miles of track.

This property will be operated separately by its own officers, under an agreement  
between the two above-named proprietary Companies.

Norfolk & Portsmouth Belt Line Railroad:  
The Norfolk & Portsmouth Belt Line Railroad, a terminal line extending from Pinner's  
Point, Va., through Portsmouth and Norfolk, to a connection with the Norfolk & Western  
Railway, in Berkeley, Va., was completed and opened for business in September, 1898. The  
Southern Railway Co. owns one-eighth of the capital stock of the Norfolk & Portsmouth  
Belt Line Co., the other seven-eighths being owned equally by the other Railroad Com-  
panies having terminals on the Elizabeth river. The property is operated independently for  
the interchange of traffic between the railroads centering at Norfolk. This connection  
enables the Southern Railway to reach the city of Norfolk by rail, and has materially in-  
creased the facilities for the interchange of cars by the several Railroad Companies  
interested.

New Industries:  
The development of manufacturing industries in the South, and upon the Southern  
Railway Co.'s lines, continues to be very marked and encouraging. The greatest activity  
is in connection with the iron industry, and in the manufacture of textile fabrics, but there  
is also a steady growth in diversified manufactures, including such articles as wagons,  
furniture, agricultural implements, brick and tiles, glassware, canned goods, leather, etc.

The most important development of recent years, however, is the inauguration on a  
large and substantial scale of the manufacture of Southern iron into steel by the open-  
hearth or basic process.

With this industry firmly established, as it now promises to be, the market for the  
output of Southern furnaces will be greatly widened, and the advantages of the South in  
the matter of cheap production of pig iron will be still further emphasized, to the increased  
profit and benefit of that entire section of country, not only in the sale of the steel itself,  
but in the creation of numerous collateral manufactures for converting it into finished  
products.

Pursuant to the policy adopted in 1897, the accounts of the Company have been ex-  
amined by certified public accountants, and the certificate of Messrs. Patterson, Corwin &  
Patterson, as the result of the examination, is attached to this report.

Special attention is directed to the General Manager's report for statistics, details of  
earnings and expenses, materials used, betterments made and economies accomplished in  
the operation of the property.

The acknowledgments of the Board are due to all officers and employes for the faithful  
and efficient discharge of their duties during the year.

Respectfully submitted, by order of the Board,  
SAMUEL SPENCER, President.

## SOUTHERN RAILWAY COMPANY.

Office of Third Vice-President and General Manager.

Washington, D. C., August 15, 1899.

Mr. Samuel Spencer, President, New York:

Dear Sir—Below please find report of the operations and physical condition of the  
Southern Railway properties for the year ended June 30, 1899:

## MILES OF ROAD OPERATED.

The number of miles of road operated on June 30, 1898, was..... 5,231.67  
The number of miles of road operated on June 30, 1899, was..... 5,958.68

An increase of..... 727.01

A detailed statement of the roads operated on June 30, 1899, is given in Table No. 19.  
The details of the increase in miles operated are as follows:

Additions:  
Aiken Branch—Edgefield to Aiken, S. C..... 23.58 miles.  
Castleman Branch—Castleman Junction to Castleman, Ala..... 3.63 "  
North Carolina Midland Railroad Extension—Mocksville to  
Mooresville Junction, N. C..... 27.47 "  
South Carolina & Georgia Railroad and Augusta Southern Rail-  
road—Augusta, Ga., to Charleston, S. C., Augusta, Ga., to  
Tennille, Ga., Columbia to Branchville, S. C., and Branches 323.20 "  
Atlantic & Yadkin Railroad—Sanford to Mount Airy, N. C., and  
Branches..... 166.22 "  
Carolina Midland Railway—Allendale to Seavern, S. C..... 54.14 "  
Seavern & Knoxville Railroad—Seavern to Batesburg, S. C..... 17.44 "  
Mobile & Birmingham Railroad—Marion Junction to Mobile, Ala. 148.55 "  
Mobile, Ala., L. & N. Trackage—Lipscomb Street to Union Pas-  
senger Station..... .75 "  
Addition by remeasurement—Asheville & Spartanburg Railroad. .50 miles.  
Roswell Branch..... .69 "  
764.98 miles.  
1.19 "  
766.17 miles.

Reductions:  
Part of Henry-Elgin Branch taken up..... 2.19 miles.  
Lauderdale Branch taken up..... 13.77 "  
Discontinuance of trackage over Alabama Great Southern Rail-  
road between Mobile Junction and Blocton, Ala..... 23.20 "  
39.16 "  
Net increase..... 727.01 miles.

The lines of road are located as follows:  
District of Columbia..... 2.27 miles.  
Virginia..... 708.71 "  
North Carolina..... 1,317.14 "  
South Carolina..... 896.44 "  
Georgia..... 963.76 "  
Alabama..... 996.65 "  
Mississippi..... 291.77 "  
Tennessee..... 167.19 "  
Kentucky..... 134.75 "  
Total..... 5,958.68 miles.

The average number of miles of road operated by the Company in the year 1898-99,  
including acquired roads shown in foregoing table under head of "Additions," was 5,377.30,  
as compared with 4,937.43 miles in the previous year. For purposes of proper comparison,  
however, the following statistics relating to earnings and expenses cover only the opera-  
tions of 5254 miles of road which were included in the Southern Railway system during  
the entire year ended June 30, 1899, as compared with the operations of the same lines for  
the entire year preceding.

## EARNINGS AND EXPENSES.

	1899.	1898.	Differences.	
			Inc. or Dec.	Per ct.
Earnings:				
From Freight.....	\$15,901,845 41	\$14,632,376 95	\$1,269,468 46	8.68
From Passenger.....	6,980,554 44	5,650,760 87	\$1,329,793 57	23.54
From Mail.....	1,250,802 53	1,244,167 43	\$6,635 10	.53
From Express.....	500,305 86	462,705 82	\$37,600 04	8.15
From Miscellaneous.....	305,391 92	418,384 31	\$122,992 39	5.50
Total Earnings.....	\$25,028,900 16	\$22,408,401 38	\$2,620,588 78	11.69
Expenses:				
For Conducting Transportation.....	\$8,174,138 93	\$7,766,151 43	\$407,987 50	5.25
For Maintenance of Way and Structures.....	3,545,530 02	3,204,059 33	\$341,470 69	10.66
For Maintenance of Equipment.....	3,757,601 88	2,906,873 01	\$850,728 87	29.27
For General Expenses and Taxes.....	1,640,515 65	1,580,013 37	\$60,502 28	3.81
Total Expenses.....	\$17,117,786 48	\$15,457,097 14	\$1,660,689 34	10.74
Net Earnings from Operation.....	\$7,911,203 68	\$6,951,304 24	\$959,899 44	13.81
Ratio of Expenses to Earnings.....	68.39	68.98		.59

\*Increase. †Decrease.

## COMPARISON OF STATISTICS.

Freight Traffic:  
The freight earnings increased \$1,269,468.46, or 8.68 per cent.  
The number of tons of freight carried increased 573,974 tons, or 5.95 per cent.  
The number of tons of freight carried one mile increased 184,231,315 tons, or 11.60  
per cent.  
The average length of haul of freight per ton was 173.37 miles in 1899, and 164.59 miles  
in 1898, an increase of 5.33 per cent.  
The average rate per ton per mile was .897 of a cent in 1899, as compared with .922 of  
a cent in the previous year, a decrease of 2.71 per cent.  
The average earnings of freight trains per mile run were \$1.450 in 1899, compared with  
\$1.382 in 1898; increase, 4.90 per cent.

Passenger Traffic:  
The passenger earnings increased \$1,329,793.57, or 23.54 per cent.  
The number of passengers carried increased 581,757, or 12.82 per cent.  
The number of passengers carried one mile increased 67,600,652, or 27.77 per cent.  
The average rate per passenger per mile was 2.244 cents, as compared with 2.321 cents  
in the previous year, a decrease of 3.32 per cent.  
The average distance traveled by passengers was 60.77 miles, as compared with 53.66  
miles in the previous year, an increase of 13.25 per cent.  
The average earnings of passenger trains per mile run were \$1.072 in 1899, compared with  
\$0.999 in 1898, an increase of 7.28 per cent.

Conducting Transportation:  
The total expenses for "Conducting Transportation" increased..... \$407,987 or 5.25%  
The total tonnage moved (including Company's freight) in 1899 was..... 11,707,677  
The total tonnage moved (including Company's freight) in 1898 was..... 11,153,561

An increase of..... 554,116 or 4.97%  
The total number of tons carried one mile (including Company's  
freight) in 1899 was..... 2,057,571,910  
The total number of tons carried one mile (including Company's  
freight) in 1898 was..... 1,846,565,211

An increase of..... 211,006,699 or 11.43%  
The number of miles run by passenger trains in 1899 was..... 8,277,352  
The number of miles run by passenger trains in 1898 was..... 7,487,770

An increase of..... 789,582 or 10.54%  
The number of miles run by freight trains in 1899 was..... 10,969,005  
The number of miles run by freight trains in 1898 was..... 10,581,348

An increase of..... 387,657 or 3.66%  
The number of miles run by all trains in 1899 was..... 19,831,021  
The number of miles run by all trains in 1898 was..... 18,475,206

An increase of..... 1,355,815 or 7.34%  
The number of miles run by locomotives in 1899 was..... 24,246,279  
The number of miles run by locomotives in 1898 was..... 22,333,345

An increase of..... 1,912,934 or 8.57%  
The average number of tons carried per train in 1899 (including  
Company's freight) was..... 187.58  
The average number of tons carried per train in 1898 (including  
Company's freight) was..... 174.51

An increase of..... 13.07 or 7.49%  
The average cost of conducting transportation per train mile in  
1899 was..... 41.22 cts.  
The average cost of conducting transportation per train mile in  
1898 was..... 42.03 cts.

A decrease of..... .81 cts. or 1.92%  
In the above computations the mileage of mixed trains is considered as one-fourth pas-  
senger service and three-fourths freight.



## To summarize:

The gross earnings increased 11.69 per cent.  
 The expense for conducting transportation increased 5.25 per cent.  
 The number of miles run by all trains increased 7.34 per cent.  
 The average cost of conducting transportation per train mile decreased 1.92 per cent.  
 The number of passengers carried increased 12.82 per cent.  
 The number of passengers carried one mile increased 27.77 per cent.  
 The number of tons carried (including Company's material) increased 4.97 per cent.  
 The number of tons carried one mile (including Company's material) increased 11.43 per cent.  
 The average number of tons per train increased 7.49 per cent.

## MAINTENANCE OF PROPERTY.

## (a) Maintenance of Way and Structures:

The increase of \$341,470.69, or 10.66 per cent., in expenses for maintenance of way and structures is represented by a considerable improvement during the year in the condition of the roadway and structures.

## Steel Rails:

6,407.25 tons of new 75-pound and 15,890.82 tons of new 80-pound, a total of 22,298.07

tons of steel rails, were laid during the year (as against 12,577.41 tons in the previous year), viz.:

On Washington Division.....	12.97 miles.
On Norfolk Division.....	22.93 "
On Charlotte Division.....	50.17 "
On Atlanta Division.....	39.85 "
On Birmingham Division.....	11.74 "
On Asheville Division.....	3.11 "
On Knoxville Division.....	39.96 "

Total.....180.73 miles.

## (b) Maintenance of Equipment:

The increase of \$850,728.87, or 29.27 per cent., in expenses for maintenance of equipment is represented by a continued and marked improvement in the condition of the rolling stock.

The average expense for repairs to each class of equipment per engine per mile, and per car per mile, during the five years of the Company's operations has been as follows:

	1894-5.	1895-6.	1896-7.	1897-8.	1898-9.
Locomotives per mile.....	4.19 cts.	4.12 cts.	4.89 cts.	5.58 cts.	5.56 cts.
Freight Cars per mile.....	0.47 cts.	0.48 cts.	0.47 cts.	0.53 cts.	0.77 cts.
Passenger Cars per mile.....	0.83 cts.	0.94 cts.	0.85 cts.	1.07 cts.	1.16 cts.

TABLE 1.

COMPARATIVE BALANCE SHEET, JUNE 30, 1899, AND JUNE 30, 1898.

ASSETS.		June 30, 1899.	
Cost of Road:			
Southern Railway Properties.....		\$251,105,986 93	\$252,877,040 02
Viz.: Total to June 30, 1898.....			
Atlantic & Yadkin Railway.....		1,367,366 09	
Aiken Branch.....		142,250 00	
Current New Construction, year 1898-99.....		349,995 46	
		\$252,965,598 48	
Less net credit by Sundry Adjustments.....		88,558 46	
		\$252,877,040 02	
Leasehold Estates. (Per contra "Outstanding Securities.").....			20,473,934 38
Total Cost of Road.....			\$273,350,974 40
Cost of Equipment:			
Equipment Owned.....		\$10,038,072 07	\$10,881,556 95
Viz.: Total to June 30, 1898.....			
Trust Equipment finally paid for and released from trust.....		228,960 00	
Received with Atlantic & Yadkin Railway.....		119,743 00	
Received with Aiken Branch.....		7,375 00	
Received with Carolina Midland Railroad and Seavern & Knoxville Railroad.....		10,490 00	
New and Additional Equipment, year 1898-99.....		485,209 38	
		\$10,880,969 45	
Less net credit by Sundry Adjustments.....		8,382 50	
		\$10,881,556 95	
Trust Equipment.....			1,025,751 00
Equipment Leasehold Estates. (Per contra "Outstanding Securities.").....			1,086,179 86
Viz.: North Carolina Railroad.....		\$105,000 00	
Atlanta & Charlotte Air Line Railway.....		194,005 00	
Georgia Midland Railway.....		76,150 00	
South Carolina & Georgia Railroad.....		479,462 64	
Augusta Southern Railroad.....		37,485 22	
Mobile & Birmingham Railroad.....		191,240 00	
Richmond & Mecklenburg Railroad.....		2,837 00	
		\$1,086,179 86	
Equipment Other Lines. (Per contra.).....			3,640 00
Total Cost of Equipment.....			13,597,127 81
Total Cost of Road and Equipment.....			\$286,948,102 21
Cost of Securities Pledged or Held for Control:			
Pledged under First Consolidated Mortgage (see Table 6).....		\$13,433,214 06	
Pledged under Memphis Division First Mortgage.....		700,000 00	
Pledged to secure Southern Railway Certificates of Indebtedness.....		6,224,504 32	
U. S. Government Bonds deposited under North Carolina Railroad Lease.....		182,750 00	
Securities in Treasury unpledged, held for control or as muniments of title, etc. (see Table 7).....		955,808 34	
			21,496,276 72
Total Cost of Road, Equipment and Securities Held for Control.....			\$308,444,378 93
Material and Supplies on Hand (see Table 8).....			1,103,872 73
			\$309,638,251 66
Total Capital Assets.....			1,394,000 00
Southern Railway Company Consolidated Mortgage Bonds in Treasury.....			1,647,962 42
Miscellaneous Securities Owned, in Treasury unpledged.....			15,000 00
Securities Owned, deposited under contracts.....			179,190 79
Bills Receivable—deferred, but secured.....			3,515 86
Insurance Paid, not Accrued.....			130,514 81
Sinking Funds—Uninvested Balances in hands of Trustees.....			
Current Assets:			
Cash in hands of Treasurer and in hands of Financial Agents.....		\$2,982,352 26	
Cash in transit from Agencies.....		406,323 40	
Due from Agents and Conductors.....		507,456 79	
Due from United States Postoffice Department.....		332,048 02	
Due from Connecting Lines.....		556,017 32	
Due from Individuals and Companies.....		1,043,508 20	
Bills Receivable—Current.....		66,530 14	
Total Current Assets.....			5,895,136 13
			\$318,903,571 67
LIABILITIES.		June 30, 1899.	
Capital Stock:			
Common.....		\$120,000,000 00	
Preferred.....		60,000,000 00	
Total.....		\$180,000,000 00	
Funded Debt (see Table 4).....			103,932,300 00
Outstanding Securities of Leasehold Estates (see Table 5):			
Atlanta & Charlotte Air Line Railway.....		\$7,200,000 00	
North Carolina Railroad.....		4,000,000 00	
Georgia Midland Railway.....		1,650,000 00	
South Carolina & Georgia Railroad.....		5,250,000 00	
Augusta Southern Railroad.....		400,000 00	
Mobile & Birmingham Railroad.....		2,700,000 00	
Richmond & Mecklenburg Railroad.....		308,000 00	
Total.....			21,508,000 00
Equipment Notes:			
Richmond & Danville Railroad.....		100,000 00	
East Tennessee, Virginia & Georgia Railway.....		32,638 72	
Memphis & Charleston Railroad.....		100,228 57	
South Carolina & Georgia Railroad.....		7,124 34	
Augusta Southern Railroad.....			
Total.....			239,991 63
Certificates of Indebtedness:			
Account Purchase Memphis Division.....		\$600,000 00	
Account Purchase South Carolina & Georgia Railroad Stock and Northern Alabama Railway Bonds and Stock.....		2,000,000 00	
Account Purchase Carolina Midland Railway Bonds and Stock and Seavern & Knoxville Railroad Stock.....		350,000 00	
Total.....			2,950,000 00
Mortgages on Real Estate:			
Norfolk, Va.....		\$50,000 00	
Washington, D. C.....		8,000 00	
Total.....			58,000 00
Equipment Other Lines:			
Roswell Railroad.....		\$3,640 00	
Richmond & Mecklenburg Railroad.....			
Total.....			3,640 00
Total Capital, Funded and Lien Liabilities.....			\$308,691,931 63
Reserves:			
For Maintenance of Way.....		\$301,335 78	
For Maintenance of Equipment.....		546,452 69	
Miscellaneous.....		6,293 95	
Total.....			1,530,872 42
Sundry Accounts.....			22,208 69
Interest and Rentals Accrued, not Due.....			597,465 38
Taxes Accrued, not Due.....			287,821 67
Reserve for Dividend No. 4, 1 per cent., on Preferred Stock, payable in October, 1899.....			600,000 00
Current Liabilities:			
Interest and Rentals Due and Unpaid, including amount due July 1, 1899.....		\$1,909,531 68	
Audited Vouchers (including new construction and new equipment).....		1,252,970 80	
Foreign Freight Claims; Authorities Issued.....		30,113 28	
Pay-Rolls (June).....		857,962 06	
Wages Uncalled for.....		65,645 51	
Due Connecting Lines.....		398,217 24	
Due Individuals and Companies.....		292,236 85	
Total Current Liabilities.....			4,806,708 02
Profit and Loss (see Tables 2 and 3).....			2,366,503 88
			\$318,903,571 67



TABLE 2.

1898.

## INCOME ACCOUNT FOR YEAR ENDED JUNE 30, 1899, COMPARED WITH YEAR ENDED JUNE 30, 1898.

DR.

Exclusive of Lines

Lines Added

1899.

	1898.	DR.	Exclusive of Lines Added During Year.	Lines Added During Year.*	1899.
To Operating Expenses and Taxes:					
Maintenance of Ways and Structures.....	\$3,031,170 85		\$3,545,530 02	\$51,731 35	\$3,597,261 37
Maintenance of Equipment.....	2,751,824 32		3,757,601 88	34,702 28	3,792,304 16
Conducting Transportation.....	7,263,724 37		8,174,138 93	122,289 52	8,296,428 45
General Expenses and Taxes.....	1,455,144 90		1,640,515 05	29,845 74	1,670,361 39
	\$14,501,864 44		\$17,117,786 48	\$238,568 89	\$17,356,355 37
To Fixed Charges, including Rentals:					
Southern Railway 1st Consol. Mtge.:					
\$27,639,000.....		12 mos.,	\$1,381,950, 5%		\$1,406,950 00
1,000,000.....		6 mos.,	25,000, 5%		225,000 00
E. T. Reorganization Mtge.....		12 mos.,	\$4,500,000, 5%		203,320 00
Memphis Division 1st Mtge.....		12 mos.,	5,083,000, 4%		6,000 00
Alken Branch 1st Mtge.....		12 mos.,	150,000, 4%		
Certificates of Indebtedness:					
Account of Memphis Division.....		12 mos.,		6%	52,000 00
Account Purchase S. C. & G. and No. Ala. Securities.....		1 m. 17 ds.,		5%	13,055 55
Account Purchase Car. Mid. and S. & K. Securities.....		1 m. 13 ds.,		5%	2,090 27
R. & D. 1st Consol. Mortgage.....		12 mos.,	5,997,000, 6%		359,820 00
R. & D. Debenture Mortgage.....		12 mos.,	3,368,000, 5%		18,400 00
R. & D. Eq. S. F. Mortgage.....		12 mos.,	802,000, 5%		41,683 33
W. O. & W. 1st Mortgage.....		12 mos.,	1,025,000, 4%		41,000 00
R. Y. R. & C. 1st Mortgage.....		12 mos.,	400,000, 5%		20,000 00
R. Y. R. & C. 2d Mortgage.....		12 mos.,	500,000, 4 1/2%		22,500 00
A. T. & O. 1st Mortgage.....		12 mos.,	150,000, 6%		9,000 00
W. N. C. 1st Consol. Mortgage.....		12 mos.,	2,531,000, 6%		151,860 00
C. C. & A. 1st Ext. Mortgage.....		12 mos.,	1,997,500, 5%		99,875 00
C. C. & A. 2d Ext. Mortgage.....		12 mos.,	500,000, 7%		35,000 00
C. & G. 1st Mortgage.....		12 mos.,	2,000,000, 6%		120,000 00
E. T. V. & G. 1st Mortgage.....		12 mos.,	3,123,000, 4%		218,610 00
E. T. V. & G. 2nd Mortgage.....		12 mos.,	3,105,000, 5%		155,300 00
E. T. V. & G. Consol. Mortgage.....		12 mos.,	12,770,000, 5%		638,500 00
Ala. Cent. 1st Mortgage.....		12 mos.,	1,000,000, 6%		60,000 00
K. & O. 1st Mortgage.....		12 mos.,	2,000,000, 6%		120,000 00
Ga. Pac. 1st Mortgage.....		12 mos.,	5,000,000, 6%		339,600 00
Ga. Pac. Eq. S. F. Mortgage.....		12 mos.,	402,000, 5%		20,740 00
Va. Mid. Serial A Mortgage.....		12 mos.,	600,000, 6%		36,000 00
Va. Mid. Serial B Mortgage.....		12 mos.,	1,900,000, 6%		114,000 00
Va. Mid. Serial C Mortgage.....		12 mos.,	1,100,000, 6%		66,000 00
Va. Mid. Serial D Mortgage.....		12 mos.,	950,000, 4%		38,000 00
Va. Mid. Serial E Mortgage.....		12 mos.,	1,775,000, 5%		88,750 00
Va. Mid. Serial F Mortgage.....		12 mos.,	1,310,000, 5%		65,500 00
Va. Mid. Serial General Mortgage.....		12 mos.,	4,859,000, 5%		242,950 00
C. & R. R. Rental Mortgage.....		12 mos.,			35,300 00
North Carolina R. R. Rental Mortgage.....		12 mos.,			200,000 00
A. & C. A. L. 1st Mortgage Pref.....		12 mos.,	500,000, 4%		20,000 00
A. & C. A. L. 1st Mortgage.....		12 mos.,	4,250,000, 7%		297,500 00
A. & C. A. L. Income.....		12 mos.,	750,000, 6%		45,000 00
A. & C. A. L. Stock.....		12 mos.,	1,700,000, 6%		102,000 00
A. & C. A. L. Organization Exp.....		12 mos.,			4,000 00
S. U. & C. 1st Mortgage.....		12 mos.,	1,000,000, 4%		40,000 00
Athens Belt Line Rental.....		12 mos.,			1,050 00
Wil. & Wel. R. R. and Norfolk & Carolina R. R.—Trackage and Real Estate.....		12 mos.,			68,915 32
Georgia Midland Ry. 1st Mortgage.....		12 mos.,	1,650,000, 3%		49,500 00
Rich. & Meck. R. R. Rental.....		8 mos.,			8,400 00
South Carolina & Ga. R. R. Rental.....		2 mos.,			47,083 33
Atlantic & Yadkin 1st Mortgage.....		3 mos.,	1,500,000, 4%		15,000 00
Mobile & Birmingham R. R. Rental.....		4 mos.,			20,000 00
	5,802,767 89				6,207,252 80
To Other Deductions from Income:					
Miscellaneous Interest and Commissions.....					\$21,982 62
R. & M. R. R. Traffic Contract.....					1,500 93
R. & M. R. R. Net Earnings.....					
Net Deficit B. C. & R. Steamboat Co.....					
Miscellaneous.....					544 68
	72,571 41				24,028 23
Balance Carried to Credit of Profit and Loss for the Year.....	1,007,013 00				2,004,519 48
	\$21,444,216 83				\$25,682,155 88

\*Includes operating expenses and taxes of South Carolina & Georgia and Augusta Southern Railroads, May 1 to June 30; Mobile & Birmingham Railroad, March 1 to June 30; Atlantic & Yadkin Railway, June 1 to June 30; Carolina Midland and Seivern & Knoxville Railroads, May 21 to June 30.  
†The profits from operation of the Baltimore, Chesapeake & Richmond Steamboat Company for the year 1899 were not transferred to the Southern Railway Company, but were reserved in the treasury of the Steamboat Company.

1898.

CR.

Exclusive of Lines

Lines Added

1899.

	1898.	CR.	Exclusive of Lines Added During Year.	Lines Added During Year.*	1899.
By Gross Earnings:					
Passenger.....	\$5,394,518 05		\$6,980,554 44	\$102,008 70	\$7,082,563 14
Freight.....	13,679,164 16		15,901,845 41	197,447 87	16,099,293 28
Mail.....	1,209,294 33		1,250,802 53	10,619 04	1,261,421 57
Express.....	445,032 51		500,305 86	5,073 25	505,400 11
Miscellaneous.....	367,829 70		395,391 92	8,857 05	404,248 97
	\$21,005,838 75		\$25,028,900 16	\$324,005 91	\$25,353,686 07
By Income from Investments:					
Interest on Chester & Lenoir Bonds.....	\$6,125 00				\$6,125 00
Dividends on Alabama Great Southern Stock.....	97,282 52				97,282 52
Dividends on Norfolk & Carolina Stock.....	15,000 00				54,164 50
Dividends on Georgia Southern & Florida Stock.....	28,630 00				32,620 00
Interest on U. S. Government Bonds.....					2,550 00
Interest on Atlantic & Yadkin Railway Bonds.....					8,106 67
Interest on Northern Alabama Railway Bonds.....					7,050 41
Miscellaneous.....	2,443 77				1,944 80
	149,481 29				209,920 00
By Miscellaneous Income from Other Sources:					
Net Income from Compresses and Other Property.....	\$118,506 33				\$100,055 19
Earnings from Shepherd's Ferry, Alexandria, Va.....	7,969 38				4,283 39
Net amount received in adjustment of earnings of Atlantic & Yadkin Railway accruing prior to date of purchase and delivery of the property.....					14,211 23
Net Income K. C. G. & L. Ry. Co.....	25,104 42				
(The results of the operation of this property for 1899 are included above in the Gross Earnings and Operating Expenses of the System.)					
Cash received from Receivers of Memphis & Charleston R. R. for account of interest accrued prior to March 1, 1898, on securities issued by Southern Railway Co. for the purchase of Memphis & Charleston R. R.....	47,286 66				118,549 81
	198,806 79				118,549 81
	\$21,444,216 83				\$25,682,155 88

\*Includes Gross Earnings of South Carolina & Ga. R. R., May 1 to June 30; Mobile & Birmingham R. R., March 1 to June 30; Atlantic & Yadkin Ry., June 1 to June 30; Carolina Midland and Seivern & Knoxville Railroads, May 21 to June 30.

TABLE 3.—PROFIT AND LOSS ACCOUNT FOR YEAR ENDED JUNE 30, 1899.

Balance at credit of this account June 30, 1898.....	\$1,454,051 72
Credits:	
Credit Balance of Income Account for year ended June 30, 1899.....	2,004,519 48
Net Credit resulting from final settlement of this Company's claim against the Baltimore & Ohio Railroad and its Receivers on account of the abrogation of that Company's lease of the Harrisonburg Branch.....	16,116 15
	\$3,565,587 35
Debits:	
Dividend No. 3 on Preferred Stock, 1% paid January 20, 1899.....	\$572,904 00
Amount reserved for Dividend No. 4 on Preferred Stock, 1%, payable in October, 1899.....	600,000 00
Miscellaneous Debits.....	26,119 47
	1,199,023 47
Credit Balance carried forward June 30, 1899.....	\$2,366,563 88

TABLE 4.—FUNDED DEBT JUNE 30, 1899, COMPARED WITH JUNE 30, 1898.

Classes of Bonds.	Principal Due.	Interest Due.	Rate Per cent.	Amount Outstanding June 30, '98.	Amount Outstanding June 30, '99.
Southern Ry.:					
1st Consolidated Mort. Bonds.....	1904 J. & J.	5		\$30,033,000	\$28,804,000
"East Tennessee" Reorg. Mort. Bonds.....	1938 M. & S.	5		4,500,000	4,500,000
Memphis Division 1st Mort.....	1906 J. & J.	4-4 1/2-5		5,083,000	5,083,000
Memphis Division 2d Mort. (owned by Southern Railway Co.).....	1906 A. & O.	5		1,500,000	1,500,000
Alken Branch 1st Mort.....	1908 J. & J.	4		150,000	
Richmond & Danville R. R.:					
Consolidated Mort. Gold Bonds.....	1915 J. & J.	6		5,997,000	5,997,000
Debenture Mort. Bonds.....	1927 A. & O.	5		3,368,000	3,368,000
Equip. Sinking Fund Mort. Bonds.....	Var. dates. M. & S.	5		802,000	896,000
Washington, Ohio & Western R. R.:					
1st Mort. Bonds.....	1924 F. & A.	4		1,025,000	1,025,000
Richmond, York River & Ches. R. R.:					
1st Mort. Bonds.....	1910 J. & J.	5		400,000	400,000
2d Mort. Bonds.....	1910 M. & N.	4 1/2		500,000	500,000

Atlantic, Tennessee & Ohio R. R.:					
1st Mort. Bonds.....	1913 A. & O.	6		150,000	150,000
Western North Carolina R. R.:					
1st Consolidated Mort. Bonds.....	1914 J. & J.	6		2,531,000	2,531,000
Charlotte, Columbia & Augusta R. R.:					
1st Extended Mort. Bonds.....	1909 J. & J.	5		1,997,500	1,997,500
2d Mort. Bonds.....	1902 A. & O.	7		500,000	500,000
Columbia & Greenville R. R.:					
1st Mort. Bonds.....	1916 J. & J.	6		2,000,000	2,000,000
E. Tenn., Virginia & Georgia Ry.:					
1st Mort. Bonds.....	1900 J. & J.	7		3,123,000	3,123,000
1st Mort. Bonds.....	1930 J. & J.	5		3,106,000	3,106,000
Consolidated Mort. Bonds.....	1950 M. & N.	5		12,770,000	12,770,000
Alabama Central R. R.:					
1st Mort. Bonds.....	1918 J. & J.	6		1,000,000	1,000,000
Georgia Pacific Ry.:					
1st Mort. Bonds.....	1922 J. & J.	6		5,600,000	5,600,000
Equip. Sinking Fund Mort. Bonds.....	Var. dates. F. & A.	5		402,000	477,000
Knoxville & Ohio R. R.:					
1st Mort. Bonds.....	1925 J. & J.	6		2,000,000	2,000,000
Spartanburg, Union & Columbia R. R.:					
1st Mort. Bonds.....	1905 J. & J.	4		1,000,000	1,000,000
Virginia Midland Ry.:					
Serial Mort. Bonds, Series A.....	1906 M. & S.	6		600,000	600,000
Serial Mort. Bonds, Series B.....	1911 M. & S.	6		1,900,000	1,900,000
Serial Mort. Bonds, Series C.....	1916 M. & S.	6		1,100,000	1,100,000
Serial Mort. Bonds, Series D.....	1921 M. & S.	4		950,000	950,000
Serial Mort. Bonds, Series E.....	1926 M. & S.	5		1,775,000	1,775,000
Serial Mort. Bonds, Series F.....	1931 M. & S.	5		1,310,000	1,310,000
General Mort. Bonds.....	1936 M. & N.	5		4,850,000	4,850,000
Charlottesville & Rapidan R. R. 1st Mort. Bonds.....	1913 J. & J.	6		340,800	354,500
Atlantic & Yadkin Ry.:					
1st Mort. Bonds.....	1949 A. & O.	4		1,500,000	

Total as per Balance Sheet.....\$103,932,300 \$101,236,000

\*Including \$1,594,000 free in Company's treasury June 30, 1899.

†Including \$945,000 free in Company's treasury June 30, 1898.



TABLE 5.—OUTSTANDING SECURITIES OF LEASEHOLD ESTATES.

Atlanta & Charlotte Air Line Ry.:	Principal Due.	Interest Due.	Rate.	Amount Outstanding.	
				June 30, 1899.	June 30, 1898.
1st Mort. Pref. Bonds.....	1907	A. & O.	4%	\$500,000	\$500,000
1st Mort. Bonds.....	1907	J. & J.	7%	4,250,000	4,250,000
Income Mort. Bonds.....	1900	A. & O.	6%	750,000	750,000
Stock .....		M. & S.	6%	1,700,000	1,700,000
				\$7,200,000	\$7,200,000
North Carolina R. R.:					
Stock .....		J. & J.	..	4,000,000	4,000,000
Georgia Midland Ry.:					
1st Mort. Bonds.....	1946	A. & O.	3%	1,650,000	1,650,000
South Carolina & Georgia R. R.:					
1st Mort. Bonds.....	1919	M. & N.	5%	5,250,000	
Augusta Southern R. R.:					
1st Mort. Bonds.....	1924	J. & D.	5%	400,000	
Mobile & Birmingham R. R.:					
Prior Lien Bonds.....	1945	J. & J.	5%	\$600,000	
1st Mort. Bonds.....	1945	J. & J.	4%	1,200,000	
Preferred Stock.....		J. & D.	..	900,000	
				2,700,000	
Richmond & Mecklen- burg R. R.:					
1st Mort. Bonds.....	1948	M. & N.	4%	308,000	
Total as per Balance Sheet.....				\$21,508,000	\$12,850,000

TABLE 6.—STATEMENT OF SECURITIES OWNED BY SOUTHERN RAILWAY COMPANY AND BY IT PLEDGED UNDER ITS FIRST CONSOLIDATED MORTGAGE DEED, JUNE 30, 1899.

NAME OF SECURITY.	June 30, 1899.	
	Par value.	Book value.
Railroad Bonds:		
Alabama Central R. R. Co., Income Bonds and Script.....	\$1,355,275 00	
Danville & Western Ry. Co., 1st Mortgage 5%.....	1,051,000 00	
Elberton Air Line R. R. Co., 1st Mortgage 7%.....	150,000 00	
High Point, R. A. & Southern R. R. Co., 1st Mortgage 6%.....	402,000 00	
North Carolina Midland R. R. Co., 1st Mortgage 6%.....	801,000 00	
Piedmont R. R. Co., 1st Mortgage 6%.....	500,000 00	
Piedmont R. R. Co., 2d Mortgage 6%.....	500,000 00	
Southern Railway Co. in Kentucky, 1st Mortgage 5%.....	3,000,000 00	
Southern Railway Co. in Mississippi, 1st Mortgage 5%.....	200,000 00	
Western North Carolina R. R. Co., 1st Mortgage 6%.....	1,325,000 00	
Washington, Ohio & Western R. R. Co., 1st Mortgage 4%.....	221,000 00	
Yadkin R. R. Co., 1st Mortgage 6%.....	615,000 00	
Total Bonds.....		\$10,120,275 00
Railroad Stocks:		
Alabama Great Southern Railway Co., Limited, Class "A".....	\$1,725,000 00	
Alabama Great Southern Railway Co., Limited, Class "B".....	4,540,050 00	
Knoxville & Ohio R. R. Co.....	1,111,300 00	
Southern Railway Co. in Kentucky.....	998,200 00	
Total Stocks.....		\$8,374,550 00
Other Securities:		
Baltimore, Chesapeake & Richmond Steamboat Co., Certif. of Indebtedness.....	\$250,000 00	
Baltimore, Chesapeake & Richmond Steamboat Co., Capital Stock.....	250,000 00	
Total other Securities.....		\$500,000 00
Total Bonds, Stocks and other Securities.....		\$18,994,825 00
Book Valuation, as per Balance Sheet.....		\$13,433,214 06

TABLE 7.—STATEMENT OF "SECURITIES IN TREASURY UNPLEDGED," HELD FOR CONTROL OR AS MORTGAGES OF TITLE, ETC., JUNE 30, 1899.

NAME OF SECURITY.	June 30, 1899.	
	Par value.	Book value.
Railroad Bonds:		
Blue Ridge R. R. Co., Mortgage Loan 7%.....	\$496,000 00	
Franklin & Pittsylvania R. R. Co., 1st Mortgage 5%.....	74,500 00	
Hartwell Ry. Co., 1st Mortgage 5%.....	20,000 00	
Lawrenceville Branch R. R. Co., 1st Mortgage 7%.....	30,000 00	
Total Bonds.....		\$620,500 00
Railroad Stocks:		
Alabama Great Southern Ry. Co., Limited, Class "B".....	\$65,500 00	
Atlantic & Yadkin Ry. Co.....	1,000,000 00	
Asheville & Spartanburg R. R. Co.....	1,047,981 83	
Augusta & Summerville R. R. Co.....	66,700 00	
Cincinnati, New Orleans & Texas Pacific Ry. Co.....	400 00	
Central Railway Transfer & Storage Co.....	40,000 00	
Danville & Western Ry. Co.....	368,600 00	
Danville, Mocksville & Southwestern R. R. Co.....	50,200 00	
Elberton Air Line R. R. Co.....	89,850 00	
Georgia Midland Ry. Co.....	1,000,000 00	
Hartwell Ry. Co.....	20,000 00	
High Point, Randleman, Asheboro & Southern R. R. Co.....	212,500 00	
Knoxville & Ohio R. R. Co.....	6,000 00	
Lawrenceville Branch R. R. Co.....	75 00	
Mobile & Birmingham R. R. Co., Common.....	866,700 00	
North Carolina Midland R. R. Co.....	787,600 00	
Northern Alabama Ry. Co.....	58,600 00	
Richmond & Mecklenburg R. R. Co.....	300,000 00	
South Carolina & Georgia R. R. Co.....	320,300 00	
Southern Ry. Co. in Kentucky.....	1,800 00	
State University R. R. Co.....	16,800 00	
Spartanburg, Union & Columbia R. R. Co.....	1,000,000 00	
Yadkin R. R. Co.....	462,750 00	
Total Stock.....		\$7,782,256 83
Other Securities:		
East Tennessee Telegraph Co. Stock.....	\$1,750 00	
Sheffield Machine Works, 1st Mortgage 6% Bonds.....	100,000 00	
Sheffield Machine Works Stock.....	25,500 00	
Southwestern Construction Co. Stock.....	16,600 00	
South Atlantic Export Co. Stock.....	25,000 00	
Miscellaneous.....	32,333 33	
Total other Securities.....		\$201,183 33
Total, par value, Bonds, Stocks and other Securities.....		\$8,004,040 16
Book Valuation, as per Balance Sheet.....		\$955,808 34

Andrew S. Patterson. Hamilton S. Corwin.  
Stuart H. Patterson.  
Patterson, Corwin & Patterson,  
Certified Public Accountants,  
30 Broad Street.

New York, August 17, 1899.

To the Bondholders and Stockholders of the Southern Railway Company:  
We have critically examined the books and accounts of your Company, and hereby certify that the statements of income and profit and loss accounts for the fiscal year ended June 30, 1899, published herewith, agree with the books, and are correct.

We further certify that the condensed balance sheet, published herewith, correctly sets forth the financial condition of the Company as of the date June 30, 1899.

In the course of our investigation we examined the records of the departments of traffic receipts and disbursements to prove the entries of revenue and expenses on the general books, and verified the asset and liability balances by examination of the various auxiliary books and records, and by certificates of proper parties where necessary.

All important items and entries received careful attention, and were tested and proved by tracing to original authorized sources. All charges against plant, construction and equipment accounts were especially and critically investigated and found to be correct.

The cash balances were verified by comparison with the pass-books, statements or receipts of the various banks and other custodians, and by actual count of the cash in the Treasurer's office.

The securities and bills receivable owned by the Company and held in the treasury, or deposited in trust, were also located and verified.

PATTERSON, CORWIN &amp; PATTERSON.

Certified Public Accountants.

### Reduced Rates to York, Pa., via Pennsylvania Railroad, Account Sesqui-Centennial.

On account of the Sesqui-Centennial to be celebrated at York, Pa., September 3 to 6, 1899, the Pennsylvania Railroad Co.

will sell special excursion tickets from Baltimore and intermediate stations, including stations on branch lines, to York, at rate of single fare for the round trip (minimum rate twenty-five cents).

Tickets will be sold September 2, 3, 4, 5 and 6, good to return until September 7, inclusive.

## FINANCIAL NEWS.

The Manufacturers' Record invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

### New Corporations.

The Edgefield Building and Loan Association has been formed at Edgefield, S. C., with W. W. Adams, president, and J. H. Allen, treasurer.

Oliver J. Sands has been elected president, and J. W. Lockwood, cashier, of the recently-organized Exchange National Bank of Richmond, Va.

The Doddridge County Bank of West Union, W. Va., has been organized, with J. M. Gribble, president, and J. D. McReynolds, vice-president.

The Marble City State Bank of Knoxville, Tenn., will be opened September 1, with a capital stock of \$60,000, by F. R. Griffith and J. W. Crudgington.

A new bank is being organized at Bay St. Louis, Miss., by E. H. Roberts, G. W. Dunbar's Sons, Peter Hellwege and other citizens of Bay St. Louis and Waveland.

The Birmingham Debenture Redemption, with an authorized capital of \$250,000, has been organized, with Reuben F. Kolb, president; W. L. Dodd, secretary and treasurer; W. D. Lee, general manager.

### New Securities.

The \$6000 6 per cent. school bonds of Elba, Ala., have been taken by J. F. Sanders at 101.

The election upon the issuance of \$25,000 water bonds at Elberton, Ga., will take place September 2.

The commissioners' court of Orange, Texas, has authorized an issue of \$10,000 4 per cent. bridge bonds.

The issue of \$8000 bridge bonds of Bexar county, Texas, has been approved by the assistant attorney-general.

Polk county, North Carolina, has decided to issue \$100,000 bonds to build a railroad from Forest City to Columbus.

Franklin county, Tennessee, will vote March 1 next upon the proposition to market \$100,000 turnpike improvement bonds.

Feder, Holzman & Co. were the successful bidders for the \$35,000 4 per cent. improvement bonds of Bollinger county, Missouri.

The city council of Durham, N. C., will advertise for sealed bids for its \$100,000 worth of stock in the Durham & North-eastern Railroad.

The board of supervisors of Jackson county, Mississippi, have authorized the issuance of \$8000 jail bonds. The county-seat is Jackson.

The issue of \$65,000 water and electric-light bonds of Gastonia, N. C., recently voted, is now for sale. Address John F. Love, city clerk.

The town of Durant, Miss., has decided to issue \$12,000 schoolhouse and \$10,000 electric-light bonds. Address W. H. Mullen, city clerk.

The issue of \$70,000 3½ per cent. refunding bonds of Nashville, Tenn., has been awarded to the Fourth National Bank of that city at 101.82.

The issue of \$35,000 courthouse bonds of Cooper county, Texas, which has been approved by the attorney-general, will be placed on the market at once.

The attorney-general has been asked to approve the issue of \$50,000 4 per cent. bridge bonds recently voted by the commissioners' court of Harris county, Texas.

The \$25,000 5 per cent. improvement

bonds of Biloxi, Miss., which were sold July 24 will be reoffered, as they were not sufficiently advertised in local papers. Sealed bids will be received until September 12 by D. A. Nash, chairman finance committee.

The commissioners of Lauderdale county, Alabama, have authorized an issue of \$24,000 5 per cent. bonds for a new courthouse. Address John B. Weakley, Florence, Ala. The loan will be repaid at the rate of \$3000 a year, interest payable annually.

The \$47,000 4 per cent. refunding courthouse bonds and the \$9000 4 per cent. refunding bridge bonds of Karnes county, Texas, have been awarded to J. B. Oldham of Dallas, Texas. Mr. Oldham has also secured the issue of \$40,000 3 per cent. refunding bonds of Dallas, Texas, and the \$11,000 4 per cent. jail and the \$28,000 4 per cent. refunding bonds of Uvalde county, Texas.

### Financial Notes.

The Central of Georgia Railway Co. has declared a dividend of 2 per cent. upon its first income bonds.

Second Auditor Ryland has invested \$33,500 in bonds of the State of Virginia for the literary fund. The latter now amounts to \$1,656,627.28.

The next annual convention of the Kentucky Bankers' Association will be held at Lexington October 25 and 26. A fine programme is being arranged.

By a new charter the recently-incorporated Washington Savings & Loan Co. has increased the minimum limit of its capital stock from \$5000 to \$25,000.

The Miners and Merchants' Bank of Lonaconing, Md., has increased its annual rate of interest in the savings department from 2 per cent. to 2½ per cent.

The comptroller of the currency has declared a dividend of 3 per cent. to the creditors of the American National Bank of New Orleans, and a dividend of 5 per cent. to those of the Missouri National Bank of Kansas City, Mo.

Owing to his appointment as president of the Exchange National Bank of Richmond, Va., Mr. Oliver J. Sands has resigned as bank examiner for Virginia and the District of Columbia. No one has yet been appointed to succeed him.

The Calvert Building & Construction Co. of Baltimore has given a trust mortgage to the Mercantile Trust & Deposit Co. of Baltimore in order to secure an issue of \$500,000 4½ per cent. bonds, the proceeds of which will be used in erecting an addition to the Equitable Office Building of Baltimore.

The report of State, private and savings banks in North Carolina, sixty-six in all, shows that the resources of State banks are \$8,558,101, loans and discounts \$5,188,288; resources of private banks \$1,350,261, loans and discounts \$779,396; resources of savings banks \$1,347,212, loans and discounts \$1,042,594.

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**Hambleton & Co.**

**Bankers and Brokers,**  
Members New York and Baltimore Stock  
Exchanges.  
9 South Street, BALTIMORE.  
High-grade Investment Bonds, Municipal, Rail-  
way, Industrial.  
Letters of Credit Available Everywhere.

**MARYLAND TRUST CO.**

Corner South and German Sts.,  
BALTIMORE.

**CAPITAL, - - \$1,500,000.00**  
**SURPLUS, - - - 1,500,000.00**

**A LEGAL DEPOSITORY FOR COURT  
AND TRUST FUNDS.**

Acts as Financial Agent for States, Cities,  
Towns, Railroads and other Corporations.  
Transacts a general trust business. Lends  
money on approved security. Allows interest  
on special deposits. Acts as Trustee under  
Mortgages, Assignments and Deeds of Trust;  
as Agent for the Transfer or Registration of  
Stocks and Bonds, and for the payment of  
coupons, interest and dividends.

**J. WILLCOX BROWN, PRESIDENT.**  
**LOYD L. JACKSON, FIRST VICE-PRES.**  
**HENRY J. BOWDOIN, SECOND VICE-PRES.**  
**J. BERNARD SCOTT, Secretary and Treasurer.**

**DIRECTORS.**

J. Willcox Brown,  
Wm. A. Marburg,  
Basil B. Gordon,  
Lloyd L. Jackson,  
Geo. A. von Lingon,  
H. J. Bowdoin,  
Joshua Levering,  
W. B. Brooks, Jr.,  
W. H. Baldwin,  
Fred'k W. Wood,  
Seymour Mandelbaum,  
John Pleasants.

Leopold Strouse,  
Henry Walters,  
H. A. Parr,  
B. N. Baker,  
Andrew D. Jones,  
James Bond,  
Alexander Brown,  
John A. Tompkins,  
Clayton C. Hall,  
J. D. Baker,  
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J. WM. MIDDENDORF. Members Baltimore Stock Exchange. WM. B. OLIVER.

**MIDDENDORF, OLIVER & CO.**  
**BANKERS AND BROKERS,**

No. 213 E. German Street, [KEYSER BUILDING.] Baltimore, Md.  
Stocks and Bonds Bought and Sold on Commission. Special attention given to Municipal and other  
Investment Loans. Dealers in Foreign Exchange. Drafts on Europe and Letters of Credit furnished.

**Merchants' & Farmers' Nat'l Bank**

**CHARLOTTE, N. C.**  
Capital, \$200,000. Surplus and Profits, \$60,000.  
Prompt and intelligent attention to all business  
entrusted to us.  
Correspondence invited.  
Dr. J. H. McAden, Pres. Jno. M. Miller, Jr., Cash.  
N. Y. Correspondent:  
SEABOARD NATIONAL BANK.

**JOHN L. WILLIAMS & SONS,**  
**BANKERS,**

Dealers in RICHMOND, VA.  
Southern Investment Securities,  
MUNICIPAL BONDS A SPECIALTY.  
Correspondence Invited.

**THE CONTINENTAL TRUST COMPANY,**

11 South Street, Baltimore, Md.  
**CAPITAL, - - - \$2,000,000**  
**SURPLUS, - - - 2,000,000**

**Transacts a General Trust Business.**

Acts as Fiscal Agent for the payment of Bonds,  
Coupons, Dividends, etc., of States, Municipal-  
ities, Railroads and other Corporations; as Trustee  
under Mortgages or Deeds of Trust securing  
issues of Bonds, and as Registrar and Transfer  
Agent of Stocks and Bonds; as Trustee of Estates  
and Individuals; as Administrator, Executor,  
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A Legal Depository for Court and Trust Funds.  
Money Loaned on Approved Collateral. Interest  
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**SURPLUS.....\$1,900,000**

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Is a legal depository for court and trust funds.  
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This company is a Legal Depository for funds in  
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Authorized to act as Executor, Administrator,  
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Ads. marked thus \* appear every other week.  
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 Ads. marked thus ‡ not in this issue.



## PROPOSALS.

U. S. ENGINEER OFFICE, Wilmington, N. C., August 10, 1899. Sealed proposals for furnishing Steam Inspection Boat, new or second hand, about 75 feet long, will be received here until 11 A. M., September 11th, 1899. Information furnished on application. E. W. VAN C. LUCAS, Capt., Engrs.

SEALED PROPOSALS from engineers for making surveys, plans, specifications and cost of putting in sewerage system in the City of Newman, Ga., will be received by me up to the 5th day of September, 1899, at which time the City Council will open and consider same. All proposals must be accompanied by references of the skill and ability of the party to do the work proposed. W. P. NIMMONS, City Clerk.

## SEALED PROPOSALS

from engineers for making Surveys, Plans, Specifications and Cost of Putting in Sewerage System in the City of Greenville, Mississippi, will be received by me up to the 5th day of September, 1899 at which time the City Council will open and consider same. All proposals must be accompanied by references of the skill and ability of the party to do the work proposed.

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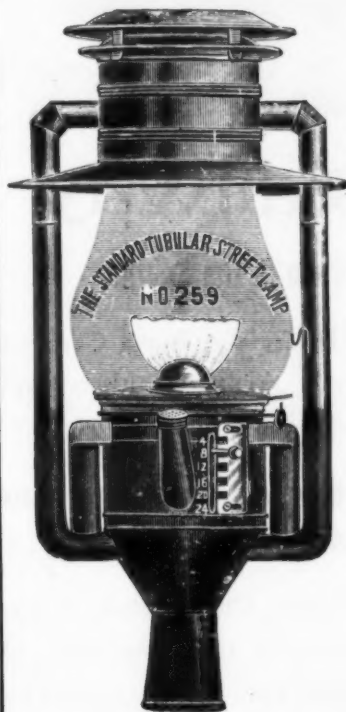
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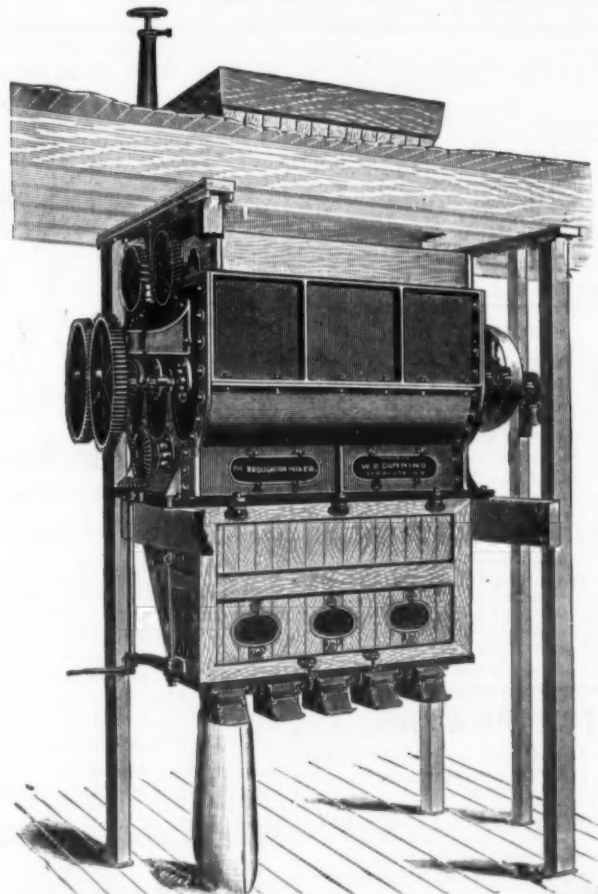
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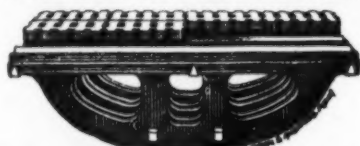
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**BIRMINGHAM, ALABAMA,** presents special advantages to manufacturers in the following lines, in which there is no local competition: Glass Bottles, etc.; Soil Pipe, School Furniture, Malleable Iron, Wood and Iron Pulleys, Wagons and Buggies, Agricultural Implements. Parties interested in any of the above are invited to correspond with

**J. B. GIBSON,**

Sec'y of the Commercial Club, Birmingham, Ala.

### Iron and Manganese Ore Lands

FOR SALE.

AT A GREAT BARGAIN, in order to wind up an estate. Write for full reports, analysis, map, &c., to

**JNO. S. WALKER,**

Exclusive Agents for the Court, Lynchburg, Va.

FOR RENT.

Glass Works to Manufacture Pressed Ware, at Richlands, Tazewell County, Virginia, on Clinch Valley Division of Norfolk & Western Railway. Building 80 ft. long, complete with tools, machinery, stack and annealing ovens. Cheap coal. Railroad track to door of works. Houses for hands. Town has water works. Healthful climate and beautiful location. Address **INVESTMENT COMPANY OF PHILADELPHIA,** 310 Chestnut St., PHILADELPHIA, PA.

## Water Power

FOR SALE.

20,700 H. P. in Wateree Canal.

**S. LOGAN LANG, Camden, S. C.**

For Sale—From 3000 to 3500 Acres of

### TIMBER LAND

situated in Georgia, Orangeburg Co., S. C., near the South Carolina Road. About half of the tract is adapted for planting purposes, cotton, rice, corn, potatoes, sugar cane and tobacco, balance standing timber, within easy reach of Branchville and Bormantown. Apply to

**W. D. CONNOR, St. Georges, S. C.**

WANTED.

### A Superintendent of Cotton Mill

of 3000 Spindles that will take from \$3.00 to \$5.00 stock. Mill will be ready for operating in about ninety days. Fine property, good water power, healthy location, cheap transportation. Address

**M. T. HARDEE, Bromley, Ala.**

### KNOTTS MILL, S. C., FOR SALE.

A magnificent water power, three miles from Florida, Central & Peninsula Railroad. In a fine farming and cotton section.

Also land on the Southern Railway, well suited for stock farming. Address

**KNOTTS & DURHAM,**

Knotts Mill, S. C.

FOR SALE.

The whole or a part interest in an old established

### Iron and Brass Jobbing Foundry.

For particulars address

**JOHN W. CLARK,**

ALBANY, N. Y.

## FOUNDRIES

FOR SALE.

One of the best equipped Foundry Plants in the country is offered for sale. The plant has a capacity of 30 tons, which can be increased to 40 tons. It has two cupolas and room for an additional one. The equipment is modern throughout. It does a large business in mining machinery and general castings, is located in Michigan, and has been operated for many years profitably. It has now plenty of orders on hand.

We will be pleased to show the plant and show the amount of business done in past years and profits made to anyone wanting to buy a first-class going plant. Satisfactory reasons for wanting to sell. For particulars address

**STERN & BOYER,**

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CHICAGO, ILL.

FOR SALE IN PITTSBURG, PA.

2 Fine

## Manufacturing Sites.

48x130 feet fronting on river and 40x110 feet fronting on river—both sites are fronting on railroad and river and are contiguous, with exceptional facilities for Coal and Natural Gas, and within 10 minutes walk of the Pittsburg Court House.

To be sold at TRUSTEES PUBLIC SALE on Friday, September 8th, at 10 o'clock A. M., on the premises. Particulars from Neville B. Craig, Trustee, or

**JAS. W. DRAPE & CO., Agents,**

425 Fourth Ave., PITTSBURG, PA.

## Galvanized Pipe at a Bargain.

I have for immediate delivery about 1700 ft. of 2 in., 3000 ft. of 1 in., and 1800 ft. of 1/2 in. galvanized pipe as good as new, having been used only three months, which I offer at considerable discount from present high prices. Parties wanting the round lot will do well to write me for prices.

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## The American Bonding & Trust Co.

OF BALTIMORE, MD.

Capital, \$1,000,000.00.

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with agencies everywhere. Accepted as surety on all bonds required to be given under the laws of the U. S. Government or the laws of the several States.

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bonds for Merchants and Manufacturers for Costs, Attachment and Replevin cases and recommend Reliable Attorneys at every point of acceptance in the United States.

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If you have any municipal bonds or warrants, taken in payment for building water works, court or school houses, jails, etc., write us. Conditions being favorable, we can use them.

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Dealers in Southern Municipal Securities,  
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## The New "General Corporation Laws" of the State of Delaware.

Fulllest security to stockholders. Minimum of annual taxes. Certain classes of corporations exempt from taxation. Meetings may be held outside the State.

Full Information, Copies of the Law, Blank Forms, etc., furnished upon application.  
**DELAWARE TRUST CO., Inc.**  
902 Market Street, WILMINGTON, DEL.



**WILLIS & HOMER, Solicitors,**  
213 Courtland Street.

# RECEIVER'S SALE

OF AN

Established Foundry, Machine and Boiler Works,  
Chatties, Stock in Trade, Etc.

OF THE

**Campbell & Zell Marine & Boiler Works**

I will, in execution of an order of the Circuit Court of Baltimore City, offer for sale by public auction, on the premises (AT THE FOOT OF WOLFE STREET), in the City of Baltimore, on the FIFTH DAY OF SEPTEMBER, 1899, beginning at 10 o'clock A. M., ALL OF THE LEASEHOLD PROPERTY, TOGETHER WITH THE VALUABLE PATENTS, PATTERNS, MACHINERY, STOCK OF BOILER TUBES, VALVES, PIPE and FITTINGS, PROPELLOR WHEELS, BAR-IRON, FIG-IRON, MERCHANDISE AND CHATTEL PROPERTY OF THE CAMPBELL & ZELL COMPANY, of Baltimore City, that is to say:

ALL THAT LOT OF GROUND situated in said city at the foot of South Wolfe street, on deep water, bounding on Wolfe street, Fells street and on the Patapsco river, known as the "Waters Wharf" or the "Campbell & Zell Marine and Boiler Works," subject to the redeemable annual ground rent of \$1710. Improved by a one-story BUILDING, 48 feet by 255 feet, containing Machine Shop, Blacksmith Shop, Engine Room and Boiler Room, a one-story Boiler Shop, 71 feet by 173 feet, and a two-story BRICK WAREHOUSE AND OFFICE BUILDING, 40 feet by 145 feet. These shops are equipped with Modern Tools of such well known manufacturers as the Niles Tool Company, Bement Miles Company, Hilles & Jones, and the Brown Hoisting and Conveying Machine Company and others.

AS ALSO ALL THAT LOT OF GROUND situated in said city bounded by Burke, Essex, Concord and Cambridge streets, subject to the annual ground rent of \$1200. This lot is almost completely covered with BRICK BUILDINGS, consisting of a Foundry, Core Shops, Cleaning House, Pattern Shop and Stable, and the premises are equipped with a Traveling Electric Crane and Jib Cranes for handling heavy work. The Pattern Shop is equipped with modern Labor-Saving Machinery and Appliances.

The above-mentioned Lots and the Buildings thereon, and the Tools and Machinery therein, constitute the Marine Machine Shops, Boiler Works and Foundry of the Campbell & Zell Company, which company is the builder of first-class Marine Engines and Boilers and the builder of the "Zell Improved Water-Tube Safety Boiler," and will be offered as a going concern, including therewith the Letters Patent of the "Zell Improved Water Tube Safety Boiler" and for other Water-Tube Boilers, and the Letters Patent for the Kahler Sewer Inlet, which letters patent are of great value and if a satisfactory bid is not made therefore the property will be offered separately or in parcels, in the manner to be made known at the time of sale.

Especially attention is called to the following:

## BOILER ROOM.

Bement Miles Combination Punch and Shears, double end, 30-inch gap; one Radial Drill, one Steam Rivet Machine, 36 inch cylinder; one Boiler Roll, with 13-inch Top Roll; one 17-inch Planer, all by the same maker; Hilles & Jones' No. 2 Horizontal Punch, one ditto No. 4 Single-End Shear, one ditto 36 inch Single-End Punch, one ditto No. 3 Round-Throat Single-End Boiler Punch, one Newton 24-inch Cold-Sawing Machine, table 32x30; one 10-ton Brown Electric Crane, one Hydraulic Bending Machine, 6-inch cylinder; one Two-Cylinder Clayton Air Compressor, one Horizontal Engine, 9x12, and others.

## MACHINE SHOP.

Bement Miles' Latest improved Engine Lathe, 64-inch swing, 28-inch bed; one ditto, 26x12. One New Haven Lathe, 26x20; one ditto, 24x9; one ditto, 18x11; one Wright Lathe, 20x8. One Jones & Lamson Turret Lathe, 2x24; one Niles Slotter, 18-inch stroke; one Niles Planer, one Detrick & Harvey Open-Side Planer, one Shaper, 20-inch stroke; one Niles Horizontal Borer and Drilling Machine, 4-inch bar; one 60-inch Bement Radial Drill Press, one ditto, 30-inch stationary head; one ditto, 20-inch sliding head; one No. 9 Jarecki Pipe Machine, etc.

## ENGINE ROOM.

One Westrom 200-ampere Dynamo, one General Electric 70 ampere Dynamo, one Upright Engine, 14x16; one 150-horse-power Zell boiler, Feed Pump, Air Compressor, Tank Switchboard, etc.

## SMITH SHOP.

Dudgeon Double Upright Steam Hammer, Bell Single Upright Steam Hammer, six Forges, Fans, Crane, etc.

## YARD.

Cranes, Hoisting Engines and Boilers. Rigger Tools, Blocks and Falls, Derrick, etc.

## FOUNDRY.

One 10-ton Yale & Towne All-Iron Foundry Jib Crane, one 6-ton Wood Foundry Jib Crane, one 6000 lb. Yale & Towne Hand Traveling Crane, one No. 3 Root Blower, one No. 4 ditto, one Upola, 30-inch; one ditto, 40-inch; Ladles, Tools, etc.

## PATTERN SHOP.

Circular, Variety, Swing, Jig and Band Saws and Tables, one 12x8 Pattern-Maker's Lathe, one ditto, 12x20; one ditto, 4x16; Drill Press, Two-Bench Fox Trimmers, one Joiner, one Marine Engine, 14x16; one Zell Water-Tube Safety Boiler, one Westrom 110-volt Dynamo, one Edison Motor, Ladles, Tools, etc.

## OFFICE FURNITURE.

CONSISTING OF DESKS, CHAIRS, TABLES, ROLLER-TOP DESK, SAFE, CABINETS, TYPEWRITER, Etc.

## MERCHANDISE AND STOCK.

One hundred and fifty tons of Pig-Iron, 50 tons Sand, 40 tons Gravel, 45 tons of Boiler Castings, 12 Propeller Wheels, 5 feet 4 inches to 12 feet; 2 tons Scrap Plates, 12 Steel D. Ums, 24 to 36 inches in diameter; 800 2-inch to 6-inch Beam and Door Hangers, assorted sizes; 100-H P Second Hand Zell Boiler, 885 Globe and Angle Valves, 8,000 Zell Assorted Boiler Bricks, 250 Boiler Tubes, 65 lengths of 2 inch Pipe, one 10-ton Ice Machine, 35 Steam Gauges, 400 ft. Brass Pipe, 94 16-ft. Sections Zell Boiler, 25 tons Rivets, 6,000 Sundry Pipe Fittings, 44,000 assorted Bolts, 3 tons Hexagon and Square Tipped Nuts 3/4 to 2 Set Screws, 5,000 Zell Boiler Gaskets, 31 tons Bar Iron and Steel, 18 doz. Files, lot of Oil, Paint, Turpentine, etc., etc, too numerous to mention.

Terms of sale for the Leasehold Property: One third of the purchase money in cash and the balance in two equal payments of six and twelve months or all cash, as the purchaser or purchasers may elect; the credit payments to bear interest and be secured to the satisfaction of the Receiver.

Terms of sale for the Chattel Property (Tools, Machinery, Fixtures Furniture Merchandise,

etc.): One-third of the purchase money in cash, and the balance to be paid upon the ratification of the sale; credit payments to bear interest from the day of sale and be secured to the satisfaction of the Receiver.

CHARLES C. HOMER, Receiver,  
O. A. KIRKLAND, Auctioneer  
N. B.—Catalogues of the property and any information desired can be procured by application to the Receiver, Auctioneer, Solicitors or upon the premises on and after August 18, 1899.

## HELP WANTED.

Advertisements under this head will be inserted hereafter at the rate of one cent a word for each insertion.

**WANTED**—A party capable of taking charge of a Paper Box Factory. Address LYNCHBURG INDUSTRIAL ASSOCIATION, Lynchburg, Va.

## SITUATIONS WANTED.

Advertisements under this head will be inserted hereafter at the rate of one cent a word for each insertion.

**WANTED**—A first-class electrical and steam engineer would like a position as superintendent of an electric lighting plant. Will put any plant in shape and make it pay interest. Address FIRST CLASS, care Mrs. Record.

**WANTED**—Open to engagement, a Chemist. Address X, care Manufacturers' Record.

**WANTED**—Bookkeeper and office man wants position. 12 years' practical experience with large corporations; age 32; married; hustler; A1 references; bond or cash security. Address H. GERWEL, 524 W. Court Street, Cincinnati, Ohio.

**WANTED**—By thoroughly competent oil mill superintendent, a position with a cotton oil company. Address W. P. COTESWORTH, Atlanta, Ga.

**PRACTICAL** Analytical Chemist (graduate), seven years' general laboratory experience, familiar with the care and handling of machinery and good hand with men, is open for a position. Address CHEMIST, care Mrs. Record.

## If You Want to Buy

TOOLS,  
MACHINERY,  
MILL SUPPLIES,

Anything used by a manufacturer, builder, miner or contractor, notify the

MANUFACTURERS' RECORD,

Baltimore, Md., and your wants will be placed before hundreds of manufacturers who will send you their catalogues and prices. It costs you nothing.

FOR THE MANUFACTURER,  
PUBLISHER, PRINTER.  
BEST WORK ~  
PROMPT DELIVERY ~  
FAIR PRICES ~



THE BALTIMORE  
ENGRAVING CO.  
BALTIMORE, MD. U.S.A.

## "PROVIDENCE"

Best in the World.

## CAPSTANS.

## WINDLASSES.

Built by the

AMERICAN SHIP WINDLASS CO., Providence, R. I.

## "THE STANDARD" SCALES

FOR Cotton-Seed Oil Mills, Cotton Gins, Railroads, Mines, Mills, Warehouses AND ALL PURPOSES  
Used by U. S. Government, Leading Railroads and Manufacturers.

THE STANDARD SCALE & SUPPLY CO., Limited, Manufacturers,  
PITTSBURGH PA.



## ...SPECIAL PREMIUM OFFER...

### A NECESSITY ON EVERY FARM.

EVERY FARMER knows the great aggravation and worry caused by the constant breaking of harness, and the inconvenience of going miles to a repair shop for a break which, with proper tools, would take but a moment to repair.

All of this trouble can be saved by the use of the RIVETING MACHINE here illustrated.



We will forward this complete machine, with a box of assorted rivets to every new subscriber for the Southern Farm Magazine on receipt of the subscription price (\$1.00) and 25 cents additional.

In this way you get both the Magazine for a year and the Riveting Machine for only \$1.25.

Or you can buy the machine for \$1.00 in cash.

It is the most COMPLETE HARNESS RIVETER EVER INVENTED.

It punches a hole in the leather, forces the rivet through and clinches it all by one downward stroke of the lever.

Will REPAIR HARNESS OR BELTING IN THE BARN, FIELD OR SHOP.

Will mend harness on the most nervous horse, as it is absolutely noiseless.

Weights only three and a half pounds.

It is made in the most durable manner; there are no delicate parts about it to get out of order or to need repair. Will last a great many years with ordinary use.

If carried in the wagon or carriage any load or journey can be undertaken without fear for the breaking of the harness.

IT PAYS FOR ITSELF MANY TIMES OVER IN THE COURSE OF A YEAR.

The rivets which are used can be duplicated whenever desired at any saddlery or hardware store at a trifling cost.

The work which this machine does is of the most complete character. However bad the break, the harness will be made as strong as when new.

THIS IS AN OPPORTUNITY for every subscriber to the Southern Farm Magazine to benefit their friends and themselves.

Besides the \$1.00 worth contained in a year's subscription to the Southern Farm Magazine, this machine, which sells for \$1.00 everywhere, can be secured for only 25c. additional. By special arrangement with the manufacturers of the machine we are able to offer it on these favorable terms.

### IT IS AN OPPORTUNITY NOT TO BE MISSED.

Send Your Orders Now.

The machine will be sent to every new subscriber on receipt of the subscription price and 25 cents additional; or if present subscribers desire it, they can send us \$1.00 for a year's extension of their subscription and 25 cents extra, making \$1.25, thus getting the same benefit as new subscribers. Their paper will then be continued for a year after the present subscription expires. Expressage paid by us in either case to any address in the United States. Remittances should be made by Postoffice Order, Express Order or Check.

SOUTHERN FARM MAGAZINE,  
BALTIMORE, MD.



# Bargains in Machinery

FOR IMMEDIATE DELIVERY.

**FOR SALE.**  
One No. 3 Roots Rotary Blower. One Emery Grinder with Slides and Centers. One Mortising Machine. One 15 H. P. Engine. One Stevens Pulley Lathe. One Egan Double Surfer and Mather, and two second hand Pumps. Two Bolt Heading Machines. One Nut Tapper. Two small Steam Pumps. One Dudgeon Steam Hammer, capacity 9 tons blow.

WARRIOR MCH. WORKS, Birmingham, Ala.

## BARGAINS in New and Second-Hand MACHINERY.

Lathes from 12" to 48", Planers from 20" up to 60", 48", 54" and 60" Radial Drills, No. 2 Newton Milling Machine, No. 2 Screw Machine, Shapers, Edge Planers, Rolls, Drills, Engines, Boilers, Pumps and Dynamos.

FRANK TOOMEY, 131 N. THIRD ST., PHILA.

## BARGAINS! DYNAMOS! MOTORS!

All Apparatus Actually in Stock at Our Works.

**110 Volt Dynamos.**—1 35-light E. & C., 1 50-lt E. & C., 1 55-lt Edison, 1 65-lt Kester, 1 70-lt Ft. Wayne, 1 75-lt Kester, 1 75-lt E. & C., 1 80-lt Roth, 1 100-lt Cullen, 1 110-lt Edison, 1 150-lt Edison, 1 160-lt Jenney, 1 180-lt Westinghouse, 2 200-lt Western Electric, 2 210-lt Edison, 1 270-lt T-H, 1 270-lt Westinghouse, 1 350-lt National, 3 350-lt Edison, 1 450-lt Triumph, 2 480-lt Brush, 1 500-lt Kester, 1 540-lt National, 1 800-lt Mather M. P., 2 800-lt Edison, 1 1000-lt National, 1 1350-lt Waddell-Eng.

**Alternators.** 1 500-light Bain, 1 600-lt T-H., 2 600-lt National, 1 600-lt Westinghouse, 1 600-lt General Electric, 4 650-lt T-H., 6 750-lt Westinghouse, 1 900-lt Royal, 1 1000-lt National,

1 1200-lt Westinghouse, 1 1200-lt Gen. Electric, 2 1500-lt Westinghouse, 1 4000-lt Ft. Wayne.

**Are Dynamos.**—1 12-light T-H., 2 20-lt Excelsior, 1 20-lt Brush, 1 25-lt Wood, 2 25-lt T-H., 2 30-lt T-H., 3 30-lt Brush, 3 35-lt T-H., 1 40-lt Wood, 2 45-lt T-H., 4 45-lt Brush, 2 50-lt Standard, 1 50-lt Excelsior, 6 50-lt T-H., 3 60-lt Wood, 4 65-lt Brush, 3 75-lt Wood, 1 100-lt Western Electric, 5 125-lt Excelsior, 1 125-lt Wood.

**110 Volt Motors.**—1 1/4-hp Lundell, 1 1-hp Jenney, 1 1-hp Eddy, 1 1-hp T-H., 1 2-hp Jenney, 1 2-hp E. & C., 1 3-hp Jenney, 1 3-hp E. & C., 1 4-hp Kester, 1 4-hp Edison, 1 5-hp Ft. Wayne, 1 5-hp Kester, 1 5-hp E. & C., 1 7 1/2-hp

Edison, 1 10-hp Eddy, 2 10-hp Edison, 1 15-hp Westinghouse, 2 15-hp Edison, 1 18-hp T-H., 1 20-hp Westinghouse, 3 25-hp Edison, 1 25-hp National, 1 30-hp Triumph, 1 35-hp Kester, 1 50-hp Mather, 2 60-hp Edison, 1 75-hp National.

**220 Volt Motors.**—1 1/4-hp Diehl, 1 1/4-hp Holtzer-Cabot, 1 1-hp Crocker-Wheeler, 1 1 1/2-hp Daft, 2 2-hp E. & C., 1 3-hp C. & C., 2 3-hp Card, 1 3-hp E. & C., 1 5-hp Detroit, 2 5-hp Akron, 1 5-hp E. & C., 1 7 1/2-hp Eddy, 1 7 1/2-hp Edison, 1 10-hp Detroit, 1 10-hp Sprague, 1 10-hp Eddy, 1 10-hp Fisher M. P., 2 15-hp Eddy, 2 15-hp Edison, 1 18-hp T-H., 1 18-hp Edison, 1 25-hp T-H., 2 25-hp Edison, 2 30-hp Edison.

**500 Volt Motors.**—1 1-hp E. & C. Multipolar, 1 2-hp E. & C., 1 3-hp Sprague, 1 3-hp Jenney, 1 3-hp General Electric, 1 5-hp Wood, 1 5-hp E. & C., 1 7 1/2-hp Crocker-Wheeler, 1 7 1/2-hp Commercial, 1 7 1/2-hp E. & C., 1 10-hp Detroit, 1 10-hp Card, 1 12-hp T-H., 1 25-hp Triumph, 1 20-hp Card, 1 22-hp E. & C., 1 30-hp Rockford, 1 30-hp Edison, 1 35-hp Jenney, 4 60-hp Edison, 4 75-hp Edison, 1 125-hp Edison.

**Alternating Motors.**—1 1-hp Ft. Wayne, 1 1-hp Westinghouse, 1 2-hp General Electric, 4 3-hp Westinghouse, 1 5-hp Ft. Wayne, 1 20-hp General Electric, 1 30-hp General Electric, 1 50-hp General Electric.

220 and 500 Volt Generators. Fine Line in Stock. Standard Makes.

Send for our Monthly Bargain Sheet giving complete list with net prices. All Apparatus Guaranteed.

CHAS. E. GREGORY CO., 54-56-58-60-62 S. Clinton St., Chicago, Ill.

## Two Saw Mills

FOR SALE VERY LOW.

### One 60-in. Circular Mill.

Carriage 55 ft. long with five head blocks; 110 ft. of ways. Complete and fine.

### One Mulay Saw Mill.

Carriage 88 ft. long; two head blocks; fine order.

THOS. P. CONARD,

119 S. Fourth St., Philadelphia, Pa.

## Engine and Boiler.

One 85 H.P. Standard Tubular Boiler with front and all fittings. One 75 H.P. Hoffman & Billings Corliss Engine. One Duplex Boiler and one Heater. This outfit is in first class condition and will sell cheap if taken at once.

We also have a full line of first-class second hand Woodworking and Iron-working Machinery.

Correspondence solicited.

WISCONSIN MACHINERY CO.

125-127 W. Water Street, MILWAUKEE, WIS.

### FOR SALE.

Engines for Blast Furnaces, Foundries, Converters and Rolling Mills. MILL TRAINS (3-high), 36 in., 30 in., 20 in., 18 in., 12 in. and 6 in. SHEARS for Blooms, Billets, Plates, Sheets, Old Rails and Scrap. CRANES—Vale and Towne Pillar Crane (10-ton); Jib Cranes, Iron and Wood. STEAM HAMMERS, various sizes and makes. SQUEEZERS (Rotary). FLY WHEELS and BAND WHEELS, various sizes. Pumps, Straighteners, Roll Lathe, Riveter, Machine shop tools, etc., etc. LOCOMOTIVES, various gauges, sizes and styles.

B. M. EVERSON,  
301 Smithfield Street, PITTSBURGH, PA.  
Sales Agt. BALDWIN LOCOMOTIVE WORKS,  
Philadelphia, Pa.

## BOILERS

FOR SALE.

Four 330 horse power Zell Improved Water Tube Boilers, each containing 154 lap welded wrought iron tubes 4 ins. diameter 18 ft. long. Equipped also with steam, water and mud drums, fronts together with all necessary valves, gauges and other fixtures. They have never been used, and are first class in every respect.

BARTLETT, HAYWARD & CO.  
BALTIMORE, MD.

### SPECIAL.

All the Machinery of the Franconia Rolling Mill, Wareham, Mass., will be Sold at Bargain Prices.

16" Merchant Mill; 8" Guide Mill; both 3-high. 22x60" Corliss R. H. Engine, 14" fly wheel, 14" belt. 14x24" Buckeye Hor. Engine, 9" wheel, 25" face. 5 pair Alligator Shears; 1 Upright Shear. 2 1/2" Putnam Bolt Cutter; Drill Press; Lathes; Nut Machine, etc. Large lathe; Straightening Bed; Hot Saw; Pumps; Fans, etc. For further information, prices, etc., apply Poulterer & Co., Bullitt Building, Philadelphia.

## Engines and Boilers

and all kinds of Machinery,

FOR SALE ON SATISFACTORY TERMS.

E. J. CODD CO.

700 S. Caroline Street, BALTIMORE, MD.

### FOR SALE.

Rotary Squeezer for Puddle Mill,

complete and in good order, including brass. Ready for immediate shipment. Address,

McCULLOUGH IRON CO., Wilmington, Del.

## DO YOU WANT CHEAP?

IN A No. 1 CONDITION.

45 H.P. Ball Automatic Engine. 50 H.P. Porter Automatic Engine. 60 H.P. Green Automatic Engine. Horizontal Engines, 6 to 20 H. P. 38 inch Resaw Band Saw. 24 inch Pony Planer. Steam Pumps, Deep Well Pumps. Boilers, Horizontal and Vertical, to 125 H. P.

Canning House Outfits a specialty. Mill and Factory Supplies of every description. All inquiries cheerfully replied to.

J. D. MALLORY,

22 Light Street, BALTIMORE, MD.

## Machinery,

Parties requiring machinery for any purpose may find it to their interest to correspond with us, stating what is wanted. Institutions retiring from business, will do well to write us as we purchase outfits complete or handle them on consignment.

O. C. WORMER MACHINERY CO.

53 W. Woodbridge Street,

DETROIT, MICH.

### FOR SALE—LOCOMOTIVES, CARS, Etc.

LOCOMOTIVES of every gauge, weight and style for every service.

CARS of every gauge, weight and style for every service.

We can offer bargains at all times in anything you may be wanting, either for construction, maintenance or operation of railroads. Don't buy without getting our prices.

THE MALES CO., 15-16-17 Aetna Bld'g, Cincinnati, O.

## ONE INCH PIPE, AT A BARGAIN,

FOR SALE.

I have fifty thousand feet of good second-hand one inch black pipe for sale, and will sell the whole or any large lot at much less than real value.

G. W. SOULE, Meridian, Miss.

## Waterworks For Sale Cheap.

1 stand pipe, 8x80 ft.; 100 double hydrants, standard nozzle; 2 Worthington fire pumps, 1 600 gallons, 1 900 gallons; 1 air compressor 14"x 16"x 18". The above are in good order and have been in use only 10 years. Address

GEO. H. CORNELSON,  
ORANGEBURG, S. C.

### SPECIAL BARGAIN.

One 24x48 right hand Hamilton Corliss, with an 18" band wheel, 36" face. Can be seen here.

Wm. C. JOHNSON & SONS MCHY. CO.

513-515 N. 2d Street, ST. LOUIS, MO.

### For Quick Delivery.

1 new 40 H. P. Upright Boiler. 1 new 20 H. P. Double Cylinder, Single Drum Hoisting Engine. Also 1 25 H. P. Horizontal Engine. 1 30 H. P. Upright Boiler, in first-class condition. Address

CHAS. REUTER, SON & CO.

909 Equitable Bldg. Baltimore, Md.

## For Sale.

One 28x60" Left Hand Wetherill Horizontal Corliss Engine with wheel. One 28x54" Right Hand Hamilton Horizontal Corliss Engine. Two 26x54" Lane & Bodley Horizontal Corliss Engines, one Right and one Left Hand, with fly wheels.

W. J. CARLIN,

610 and 611 Lewis Block, PITTSBURGH, Pa.

### FOR SALE.

One H. K. Porter & Co. 7x12 narrow gauge Locomotive and one 25 horse-power Griffith & Wedge Portable Engine and Boiler. Both rebuilt and in good order. Also several new and good second-hand Horizontal and Stationary Engines.

MERWIN MCKAIG,

CUMBERLAND, MD.

### CORLISS ENGINES FOR SALE.

1 14"x30" cyl. 9 ft. wheel, 22" face. 1 16"x42" cyl. 14 ft. wheel, 24" face. 1 18"x48" cyl. 16 ft. wheel, 26" face. 1 20"x60" cyl. 18 ft. wheel, 28" face. 1 22"x66" cyl. 16 ft. wheel, 32" face. 1 24"x72" cyl. 16 ft. wheel, 30" face. 1 26"x60" cyl. 18 ft. wheel, 36" face. 1 pair 24"x48" cyl. Gear-jack Wheelock. Write for information and quotations. S. L. HOLT & CO., 67 Sudbury St., Boston, Mass.

## IRON FOR SALE.

Grand Stand at Monmouth Park Race Track, New Jersey. Composing Angles 2 in to 5 in., Cast Iron Columns, Beams, Channels, Girders, Bars, and all the iron in above stand, about 1,000 tons. Material suitable for New Buildings or Grand Stand.

JOHN LEONARD & COMPANY,

210 BROADWAY, NEW YORK.

## 2D-HAND BERRYMAN HEATERS,

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### Machinery Bought, Sold and Erected.

Engines and boilers, all styles and sizes, both new and second-hand; machinery of every description, for all purposes. Write to me for anything you want.

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## 2 60 H. P. UPRIGHT BOILERS

For Sale Cheap. All complete with

Stack and Fittings. A No. 1 condition.

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1000 to 1200 tons of 60 lb. Steel Relaying Rails with Angles, in first class condition, Southern delivery.

One Baldwin Locomotive, No. 2, 14" cylinder,

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One Passenger Coach, inside 40 ft., 26 seats. All

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One Box Car, inside 33 ft., with standard track,

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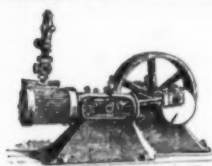
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## PLAIN SLIDE VALVE ENGINES!

Horizontal and Upright.

No expensive brick foundation required. For immediate delivery, 3 each 10, 15, 20, 25, 30, 35, 40, 50 H. P. Engines.

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## LATHES.

20 Cleveland, triple geared.  
 12" Pit lathe.  
 38-50x15 Gage, P. G., P. C. F.  
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 38-14x16 Fay & Scott, C. R., P. C. F.  
 38-16 Putnam, C. R., P. C. F., A1.  
 38-12 New Haven, C. R., P. C. F.  
 38-20 Harrington, C. R., P. C. F. and chuck.  
 38-20 Prentiss, C. R., P. C. F. and chuck.  
 38-13 Lodge & Davis, C. R., P. C. F. & taper.  
 38-18 Gleason, C. R., P. C. F.  
 38-12 Ames, C. R. and P. C. F.  
 38-10 Jones & Lamson, C. R. and P. C. F.  
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74-51x23-10 Betts Machine Co.  
 48-48x10 planer, 1 head.  
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23" plate bending rolls.  
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 2000-lb. Merrill friction board drop, 36" between housings.  
 Also a large stock of other tools.  
 Send for complete lists.

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1 No. 8 1/2 Davidson, regular heavy pressure Pumps, 14x10x14.  
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 1 Davidson independent double-cylinder vertical Air Pumps, with Condensers; capacity each to handle low-piston speed, vapors and water from 22,500 pounds steam per hour. Steam cylinders, 14 ins.; air cylinders, 21 ins.; common stroke, 18 ins.  
 All cylinders of all pumps bronze lined.

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1 Greene Patent Fuel Economizer, 7040 square feet internal heating surface with structural supports and all fittings complete. Guaranteed to save 8 to 10% of fuel—by builders.

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1 Steel self supporting Stacks, 11 ft. 8 1/2 ins. in diameter, 175 ft. high, are now erected in position.  
 The above articles have never been used.

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## Second-Hand Woodworking Machinery.

One "Bentel & Margendant" Climax 8" Combined Universal Woodworker and 8" 4-side Molder.  
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 One 36" "G. & K." Band Saw.  
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 One 24" Single Drum "Boss" Sander.  
 One "Egan" 24" Pony Planer.  
 One "Edinburg" Patent Self-feed Rip Saw.  
 One "G. & K." Jig Saw.  
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 Others too numerous to mention.

## ALL REBUILT. PRACTICALLY GOOD AS NEW. GREAVES, KLUSMAN &amp; CO.

Mfrs. of New and Improved Woodworking Machinery, 231 & 233 W. Second St., Cincinnati, O.

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14", four sided, six roll Power & Co. matcher, good as new; 24", four sided, four roll Witherby, Rugg & Richardson mat her; 14", four sided, six roll Benjamin matcher; 8" four sided Hoyt flooring machine; Woo: s 27"x12" heavy double surfacer; Four double spindle shapers of different patterns; Greenwood 42" wheel jointer, almost new.

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I am closing out the largest Lumber Plant in the South. Among the Machinery remaining unsold, and which can be bought at a bargain, are the following:

One Boiler, Warden Mfg. Co., Philadelphia, Pa. Internally fired. 200 horse power.  
 Three Manning Upright Boilers, 150 horse power.  
 Two Westinghouse Automatic Compound Engines, 200 and 250 horse power.  
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 One Westinghouse Junior Engine, 75 H. P.  
 Two Stearns Mfg. Co. Ideal Band Mills. Class "C," right hand. Class "D," left hand.  
 One Wickes Bros. No. 1 Gang, iron frame.  
 One Edger, Stearns Mfg. Co., left hand, No. 2.  
 Four S. A. Woods Machine Co., "Patent special fast feed, hardwood," Flooring Machines.  
 Six Boring Machines, W. S. Sherman & Co., Milwaukee, Wis. To attach to end of flooring machines.  
 Two "Invincible" Triple Drum Sanders, Berlin Machine Works, 48 inch.  
 One Inside Moulder (Glencove), 12 inch. No. 82. Screw feed.  
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G. M. FLEMING, Receiver for

## ALEXANDER LUMBER CO.

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FOR SALE.—One Downie Bros double acting deep well pump; steam cylinder 14" diameter x 18" stroke; 200 feet of inside and outside sucker rods; 5 1/2" working barrel; air chamber, chuck valve and lubricator; one double acting power pump, built by Chapman Co., Aurora, Ill.; 100 feet of outside and inside sucker rods, 5 1/2" working barrel. Pumps are in good working order. Price reasonable. Address letter to NARRAGANSETT BREWING CO., Providence, R. I., U. S. A.

## FOR SALE.

300 tons of 40-lb. relaying steel T rails and splices.  
 275 tons of 35-lb. relaying steel T rails and splices.  
 400 tons of 30 lb. relaying steel T rails and splices.  
 100 tons of 25 lb. relaying steel T rails and splices.  
 4 standard gauge locomotives, various sizes and styles.  
 5 narrow gauge locomotives, various sizes and styles.  
 1 narrow gauge 14-ton Shay locomotive.  
 We will sell on easy terms of payment if desired.

## THE SMITH &amp; KILBY CO.

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## For Sale at a Bargain.

About 18 eight-wheel ore cars, with drop bottoms, in good condition, capacity 15 to 20 tons. Apply to

## E. &amp; G. BROOKE IRON CO., Birdsboro, Pa.

## Relaying Rails

50, 56, 58, 60, 67 and 70 pounds to yard

## FOR SALE.

## DALLET &amp; CO.

201 Walnut Place, PHILADELPHIA, PA.

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4, 6, 8, and 10 wheel road, switch and logging Engines and Cars and equipment, standard and narrow gauge, for sale. F. M. HICKS, 225 Dearborn St., CHICAGO, ILL.

## Standard and Narrow Gauge Moguls,

10 wheelers, 8 wheelers, switchers, saddle tank and Forney type of engines. COACHES and FREIGHT CARS. WE OFFER AN EXCELLENT LINE OF NARROW GAUGE EQUIPMENT FROM A SYSTEM RECENTLY CHANGED TO STANDARD GAUGE.

## REPLACED BY ELECTRICITY.

THE SOUTH SIDE ELEVATED R. R. ENGINES weigh 28 to 30 tons. These engines are unusually well adapted to logging railroads, switching and light suburban service.

Note the following points—Short driving wheel base, swivel truck, engines turn street corners in Chicago, Westinghouse air brakes. Built in 1893. Used only five years. All engines thoroughly overhauled by us. Write for photographs and specifications.

FITZ-HUGH & CO., Monadnock Block, Chicago.  
 We can place good equipment, for sale, to advantage.

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## Steam Road Roller, Locomotives, etc.

10-ton Buffalo-Pitts Steam Road Roller, in excellent condition.  
 One 9x16 Baldwin 3 ft. gauge Locomotive.  
 One 7x12 Porter 3 ft. gauge Locomotive.  
 One 16x24 stand. gauge Locomotive with Tender.  
 Two left hand and one center Unloading Plows.  
 18" class "E" Smith-Valle Filter Press.

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## LOCOMOTIVES AND RAILS.

1 8-ton 30" gauge Locomotive. 1 12-ton 30" gauge Locomotive. 3 saddle tank 36" gauge 1.0 locomotives. 3 saddle tank standard gauge Shifters. 5 passenger type Locomotives. All in first-class condition, ready for immediate shipment. Also a quantity of 56, 60 and 70 lb. Relaying T Rails.

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We have at our shops two LOCOMOTIVES for wood rail and several light and heavy narrow and standard gauge Locomotives. Also deal in RELAYING RAILS. Write us.

## Southern Iron &amp; Equipment Co.

ATLANTA, GA.

## FOR SALE—LOCOMOTIVES.

Shay geared, also saddle tank and regular type, standard and narrow gauges, different weights and very suitable for logging purposes. Locomotives have all been overhauled and are in first-class condition.

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406 Chamber of Commerce, Detroit, Mich.

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200 to 250 tons 55 lb. steel Relaying Rails, with Angles, in first-class condition; Seaboard. 100 to 1200 tons 60 lb. steel Relayers, with Angles, in first-class condition; Southern delivery. 1500 to 2000 tons 60 lb. steel Relaying Rails, f. o. b. cars line of St. Louis, Peoria & Northern Railroad.

## THE ISAAC JOSEPH IRON CO.

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## Relaying Rails.

Second-hand equipment and light new Steel Rails  
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## WANTED TO BUY:

1 Lidgerwood Rapid Unloader, complete; state age, condition, price, where located.  
 100 Drop Bottom Ore Cars.  
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 2 8 1/2" or 9" x 10" Lidgerwood or Mundy Hoisting Engine.

We are also in the market for the purchase of all kinds of Contractors' Plant and Railroad Equipment and Machinery of every description which is in good condition, and request contractors and owners of such plant to send us complete list and specifications of what they have on hand. WE CAN TURN IT INTO CASH.

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2 60 foot, 2 50 foot Guy Derricks, ironed with American Hoist and Derrick Co. Irons.  
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## GOOD BARGAINS.

2 six wheel Baldwin Switchers with eight wheel slope back tenders.  
 9 Ten Wheelers, 18x24, practically good as new; built in 1891.  
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 10 Combination Passenger and Baggage Cars; 34-ft. bodies.  
 100 Box, flat and drop-bottom gondola cars.

Write us for propositions whether you wish to buy or sell. CASH OR EASY TERMS.

## NEW YORK EQUIPMENT CO.,

71 Broadway, NEW YORK.

Bids furnished on all kinds of Railroad Material and Rolling Stock.

## WANTED.

## Old Iron or Steel Rails.

We are in the market for Old Rails, both those fit to relay and Scrap Rails. If you have any to sell write us.

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419 Woods Street, PITTSBURGH, PA.

## HIGH-GRADE LOCOMOTIVES.

New York Elevated Railroad and Brooklyn Bridge Locomotives.

These Locomotives are Standard Gauge, until recently in service on the above-mentioned railroads, being suitable for use on Logging and Suburban roads, and for switching purposes.

They have been discontinued from service because of the introduction of electricity and the replacement by heavier locomotives; therefore, not offered for sale on account of their inefficiency. They are all in thoroughly good condition, and expert examination is invited. For prices and illustrated descriptions address

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RELAYING STEEL RAILS.

## BARGAINS.

## Second-hand Locomotives and Cars

## STANDARD GAUGE.

5 10-wheel locomotives, 44" drivers, 18"x22" cylinders, weight, 76,000 lbs.; 5 standard type 4 driver, 4-wheel truck, 14"x22" cylinders, 50" drivers, weight 30 tons, 2 Baldwin mogul locomotives, 12"x18" cylinders, 38" drivers, weight 22 tons; 2 Baldwin 4 driver and pony truck locomotives, 12"x20" cylinders, weight 20 tons; 100 standard gauge flat cars, journals, 3 1/2"x7", 40,000 lbs. capacity, trucks in fine condition. Above equipment in good condition. Subject to inspection. Prices, photographs and specifications furnished on application. We have also a complete line of railroad and mill supplies.

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100 tons of 60 lb., with Angle Bars.  
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 New Light Rails, 16 to 40 lbs. per yard.

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## New and Relaying Rails

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400 tons 56 lb. Relayers and Splices.  
 60 tons 20 lb. Relayers, no Splices.  
 35 tons 30 lb. Relayers, iron.  
 75 tons 20 lb. Relayers, iron, with Splices.  
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## RAILS AND LOCOMOTIVES FOR SALE.

550 tons 44 lb. Steel Rail, Southern delivery.  
 One 16x22 Locomotive, Rhode Island switcher type. One 14x20, American type, 26 tons. One 12x18, Forney type Baldwin, 30 tons. One 10x14, Forney type Baldwin, 18 tons. One 10x16, 20 ton Richmond Mogul. One standard gauge, 16 ton, Heisler geared Locomotive, for Wooden track. The above locomotives are all standard gauge. One 3 ft. gauge Mogul Porter Locomotive. We sell on monthly instalment plan if desired. Birmingham Rail & Locomotive Co., Birmingham, Ala.

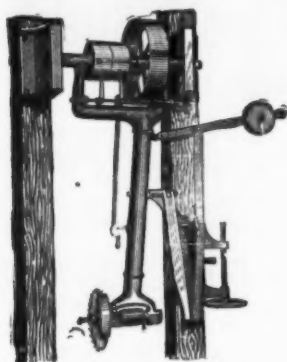
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2000 tons 65 lb. steel, in Canada. Various lots 50, 52, 60, 65 and 80 lb. rails, Buffalo and New York delivery. Address

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Parallel Swing Saw.

THIS MACHINE CUTS  
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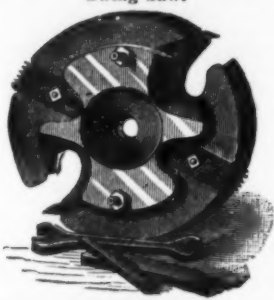
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### HIGH-GRADE WOODWORKING MACHINERY,

This Head can be used on Parallel  
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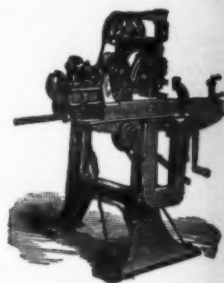
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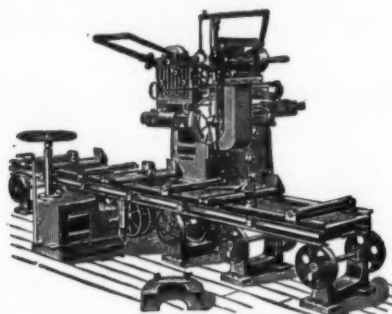
BRASS-WORKING MACHINERY,  
SHAFTING, PULLEYS, HANGERS.



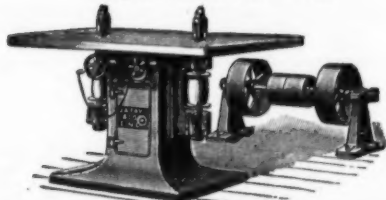
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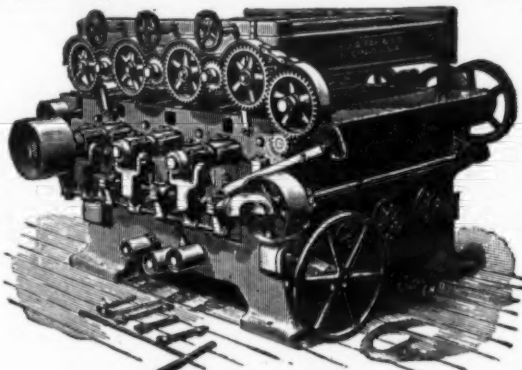


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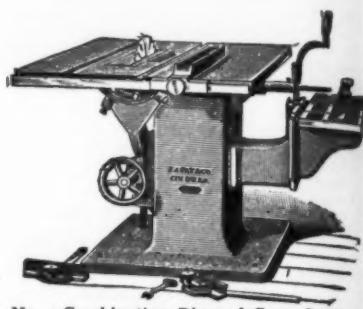
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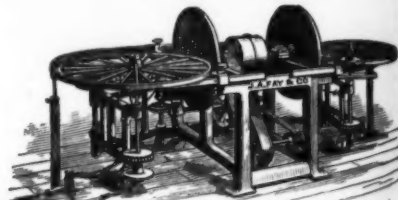


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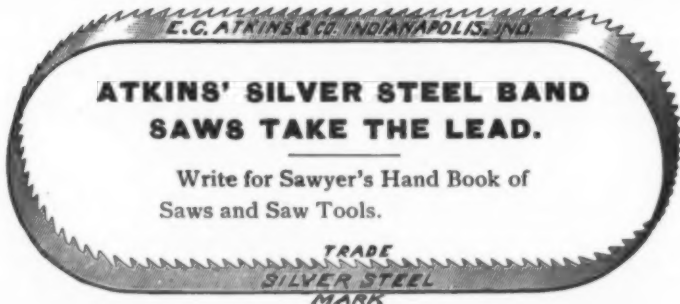
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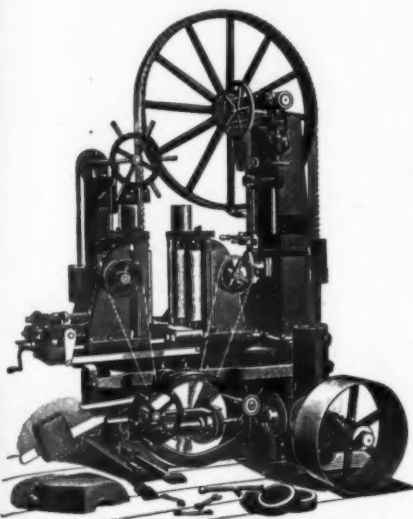
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CIRCULAR, BAND, GANG, DRAG, CROSS-CUT, HAND AND SAWS  
OF EVERY DESCRIPTION. CYLINDER SAWS RE-STEELLED.



## AMERICAN Wood-Working Machine COMPANY.



### Band Resaws

With 54-inch and  
60-inch Wheels.

This machine has six feed rolls, geared. The blade runs within one inch of center of rolls. The rolls can be tilted to saw bevel siding and adjusted clear of saw teeth.

The 54-inch machine cuts 30"x16" and the 60-inch machine cuts 36"x17".

We shall be pleased to talk with you regarding this or any other wood-working machinery you may require, and will gladly furnish information and prices upon application to our nearest salesroom.

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EXHAUST FANS, for All Uses.



Hot Blast Heating Apparatus, Dry Kiln Outfits, Steam Fans,  
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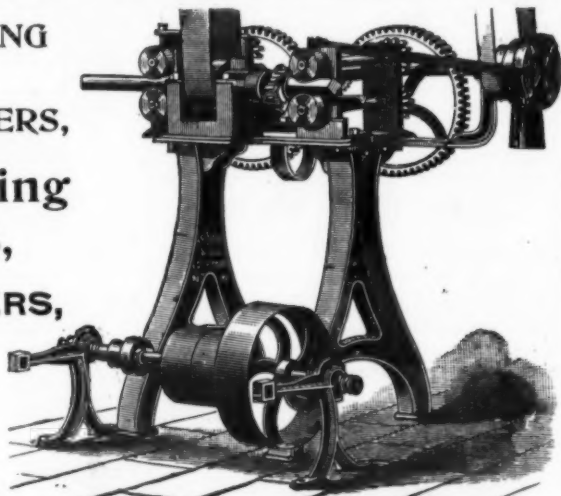
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IMPROVED ROD AND DOWEL MACHINE

Lathes for turning Handles for  
Brooms, Mops, Forks, Hoes,  
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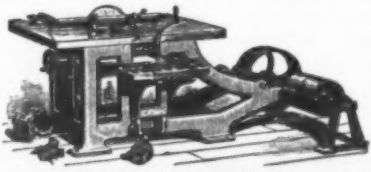
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WOOD  
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For turning Axe, Adze, Pick, Sledge, Hammer,  
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Boring Machines, Sanders,  
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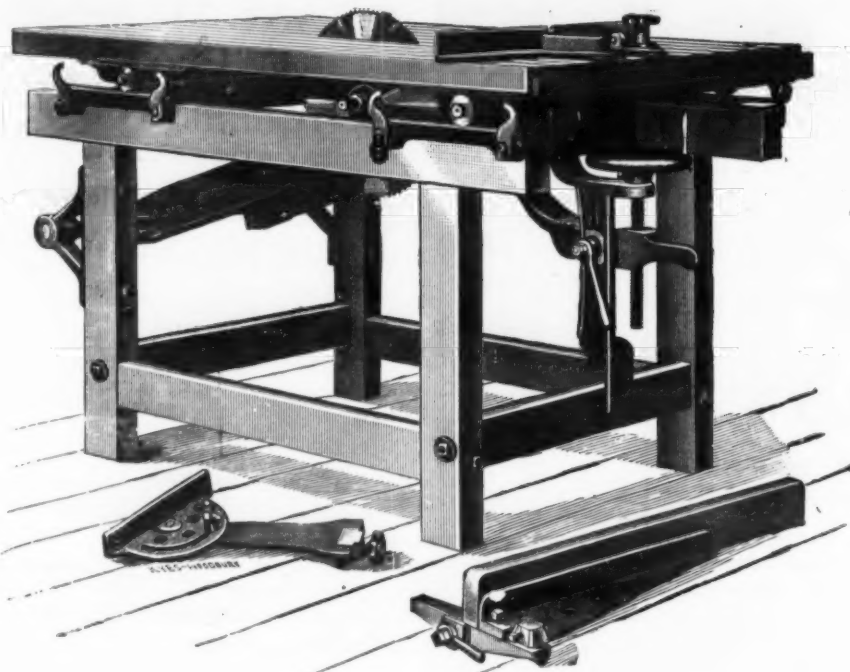
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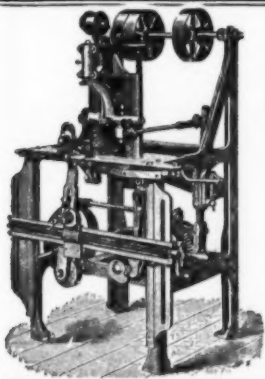
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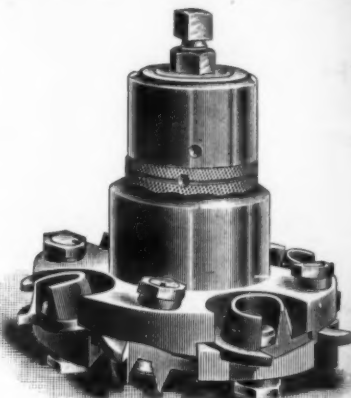
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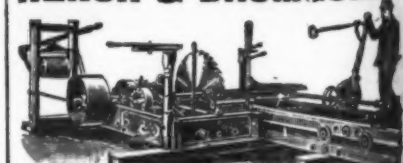
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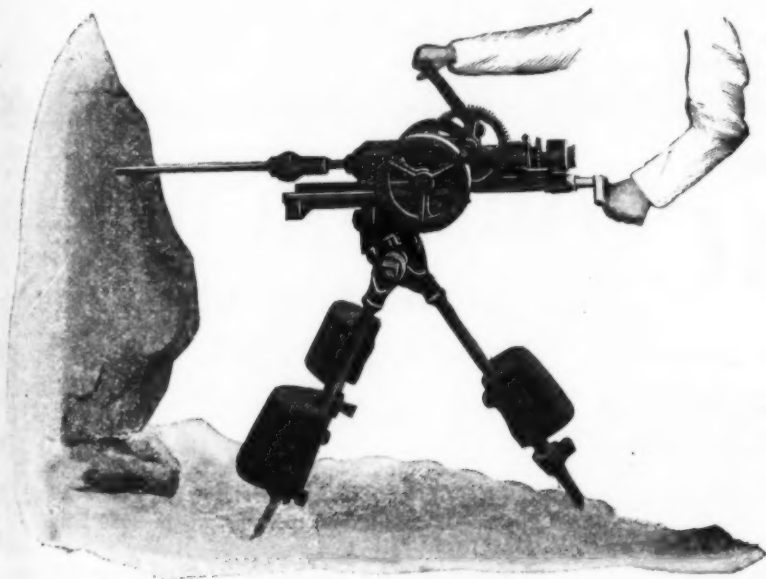
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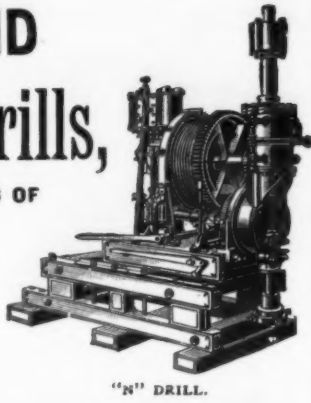


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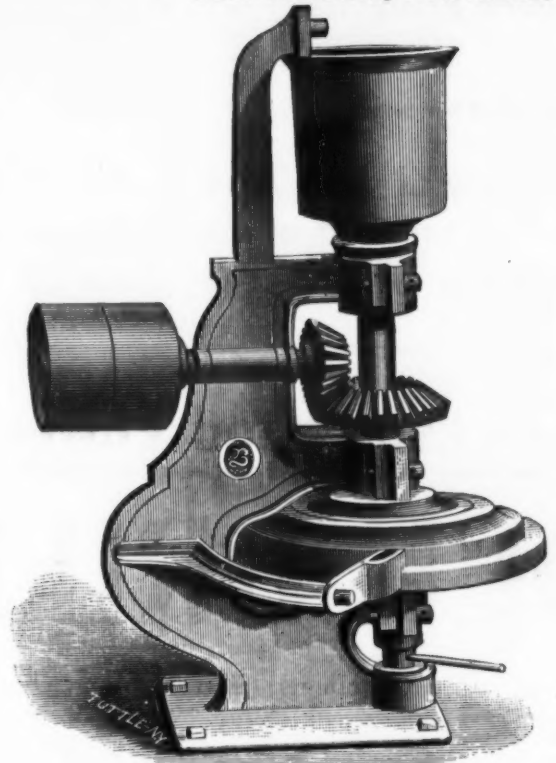
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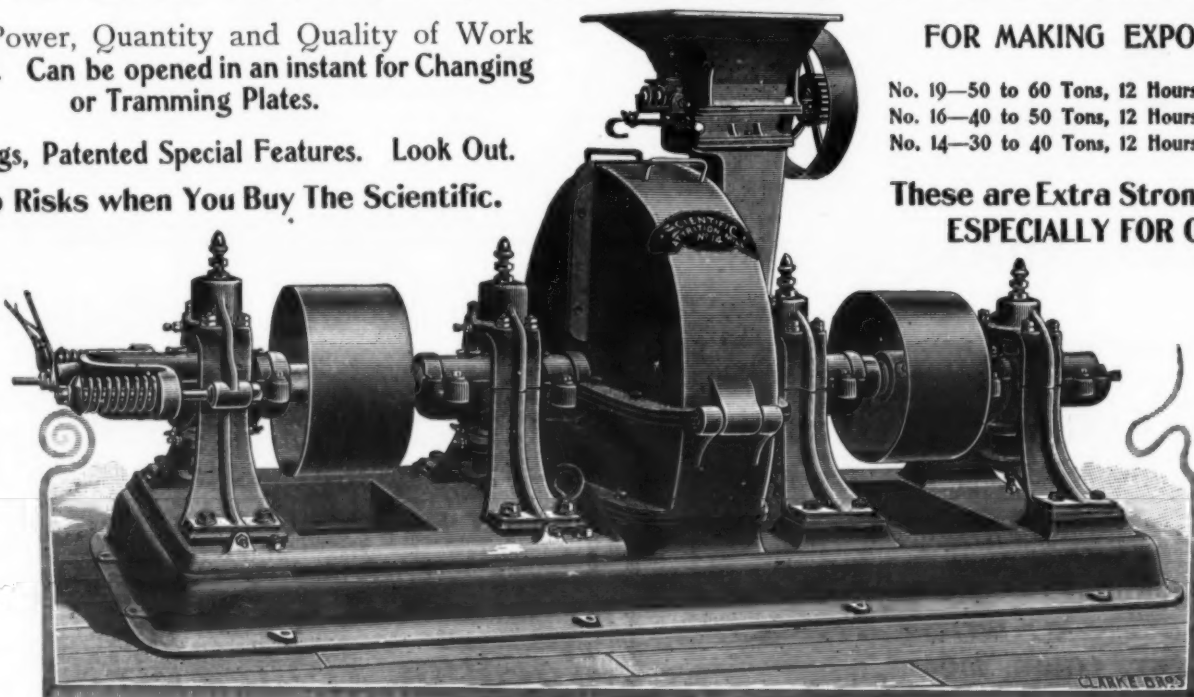
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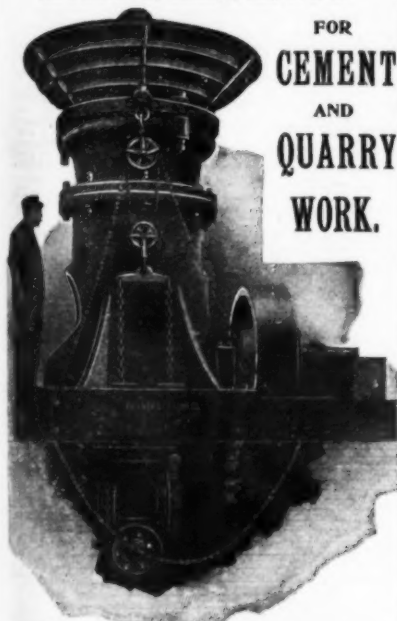
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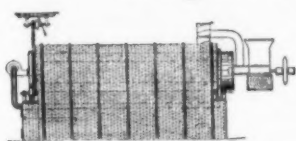
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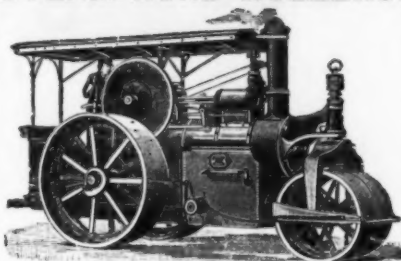
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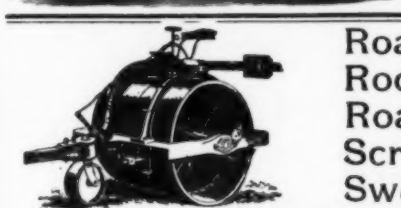
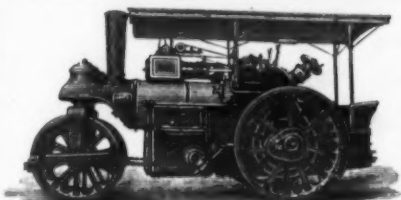
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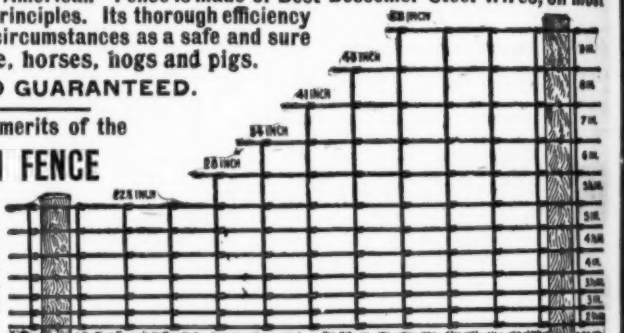
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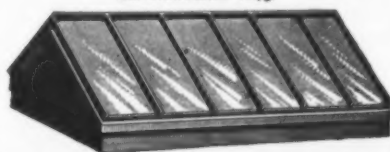
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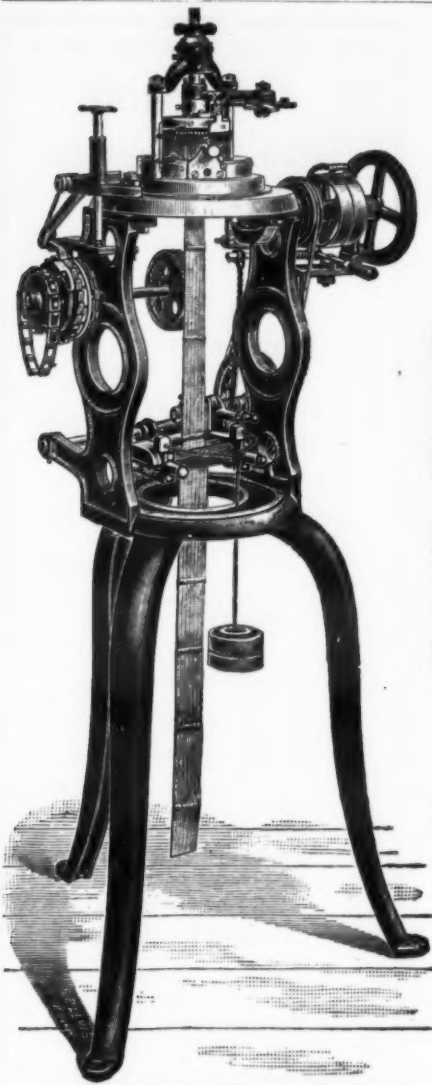
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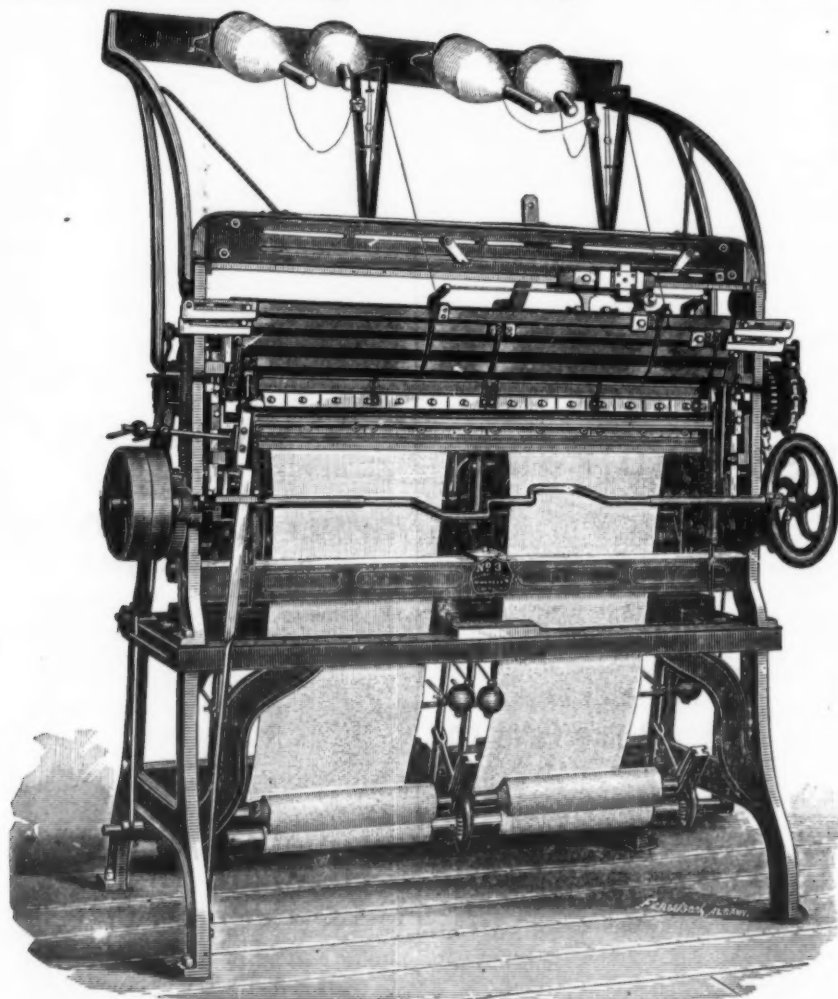
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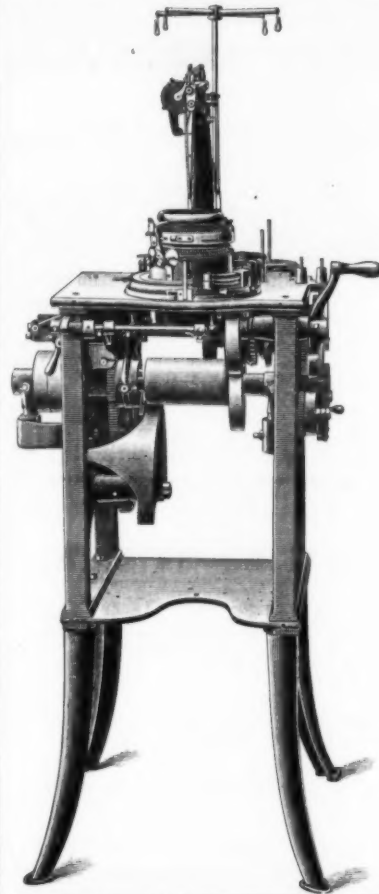
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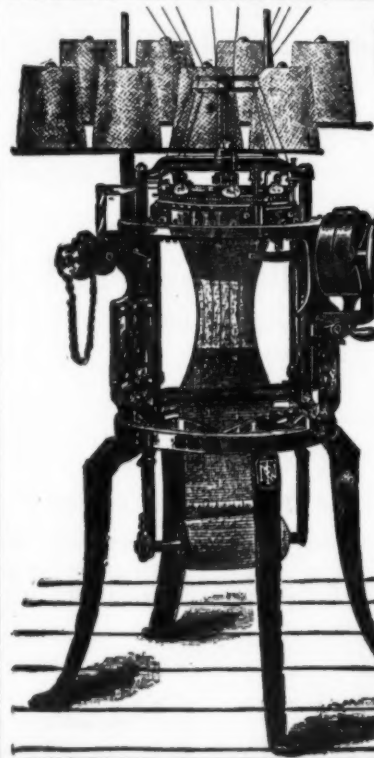
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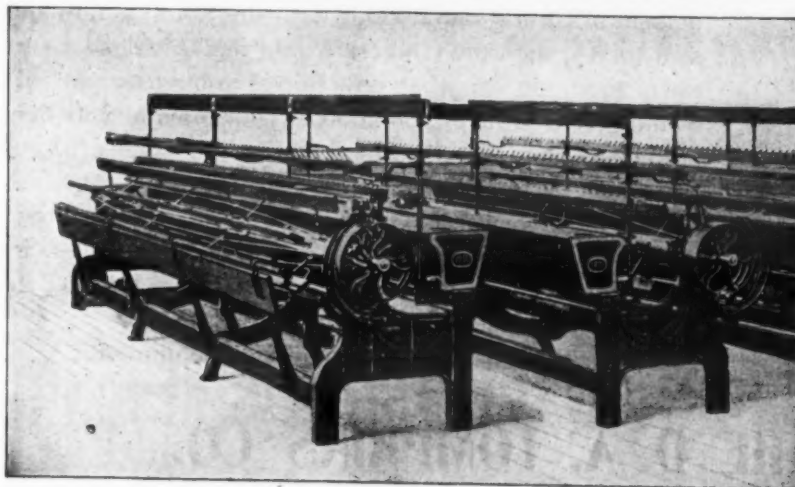
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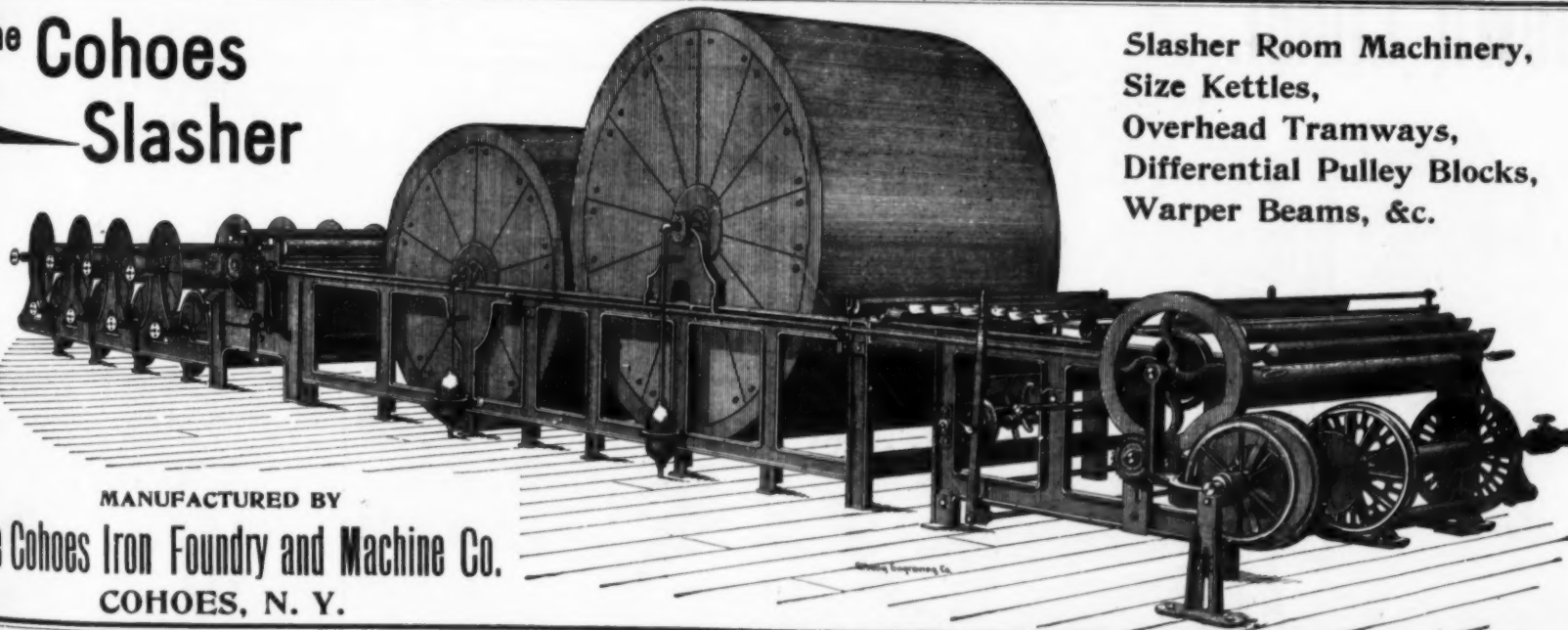
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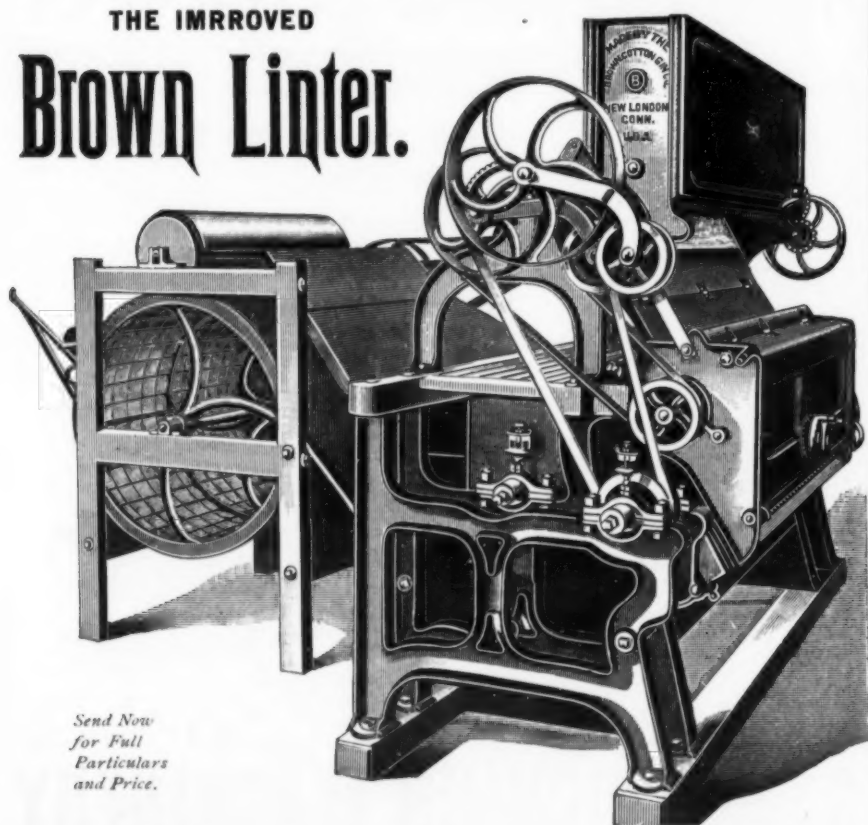
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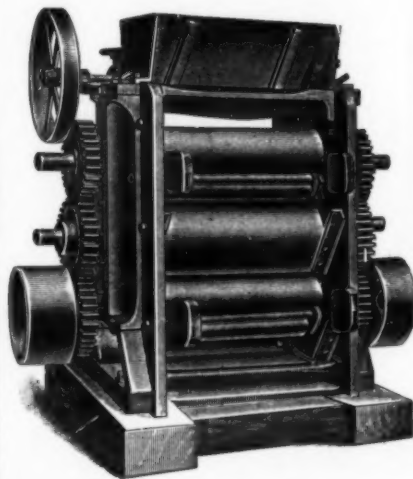
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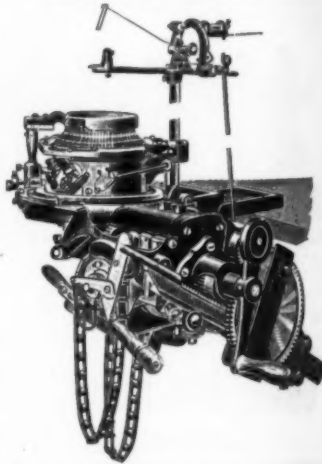
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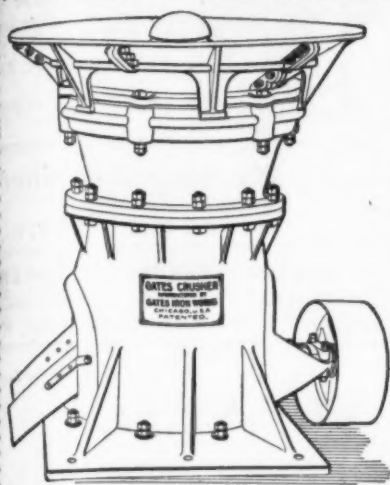
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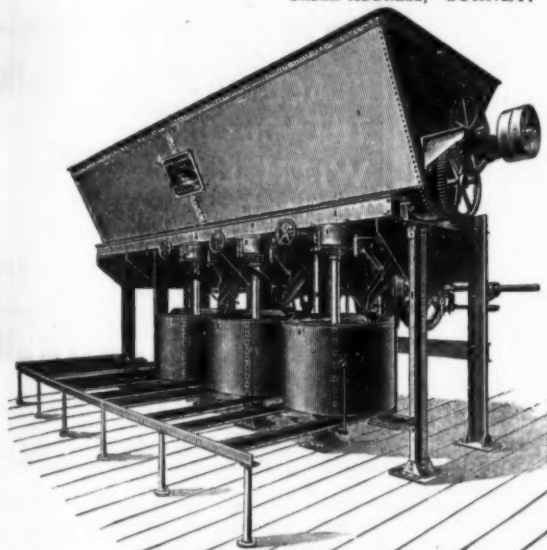
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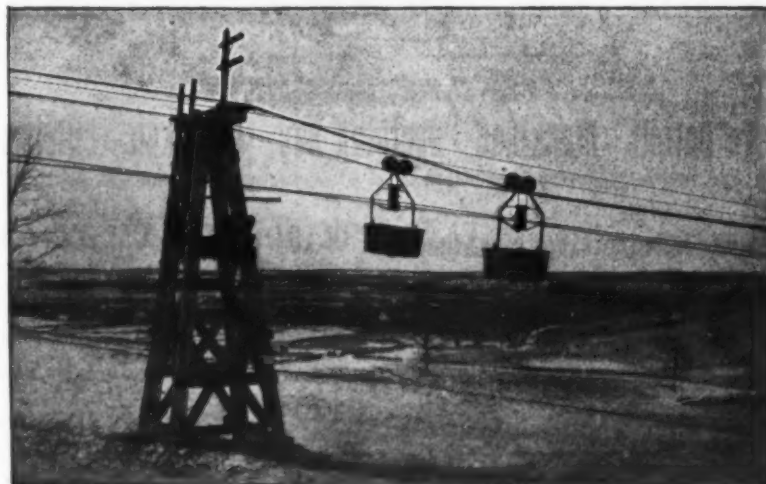
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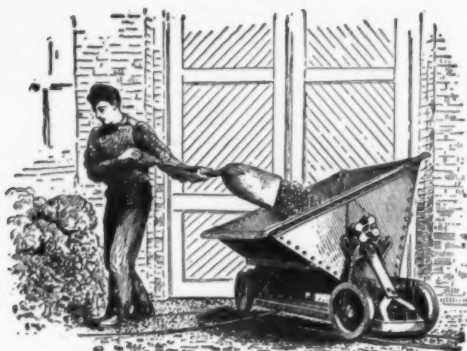
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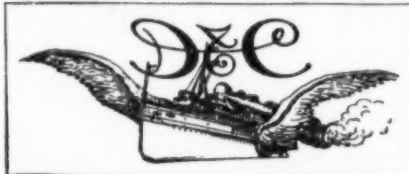
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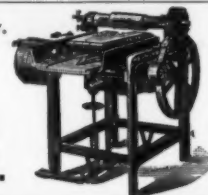
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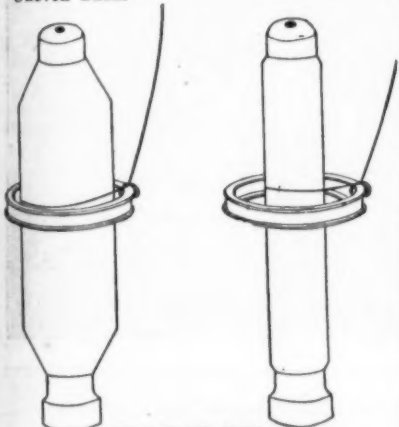
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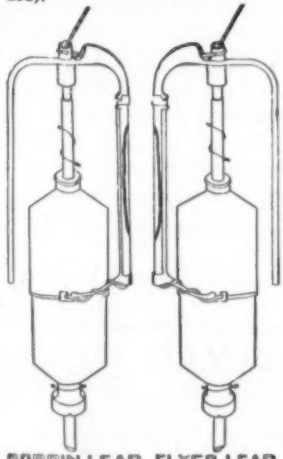
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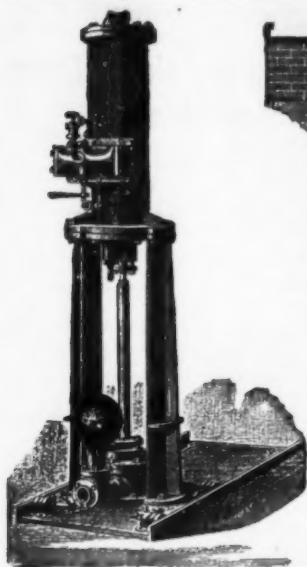
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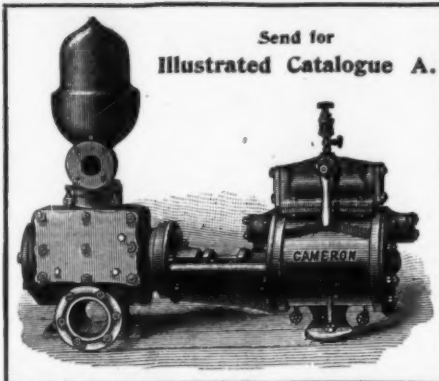
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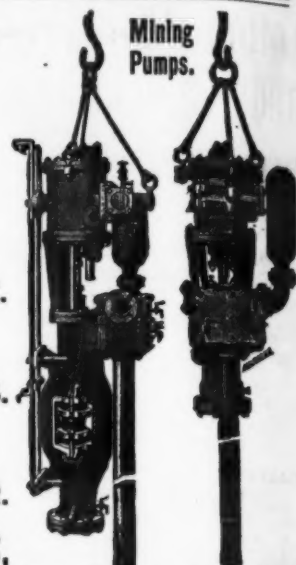


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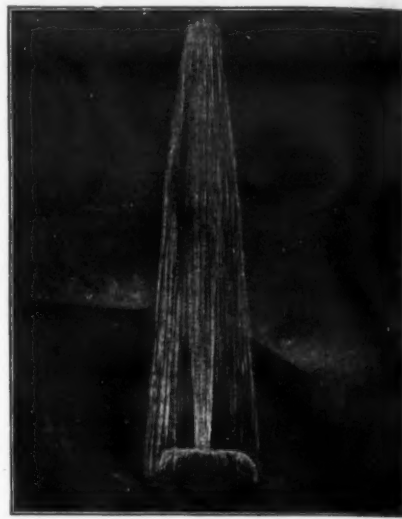
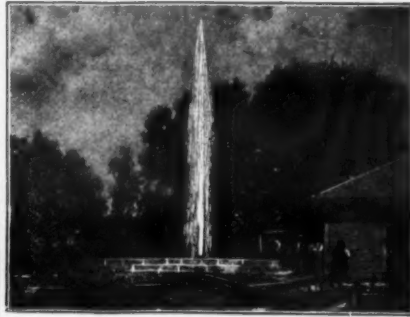
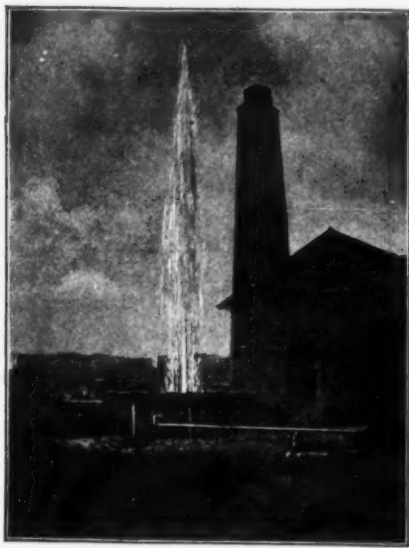
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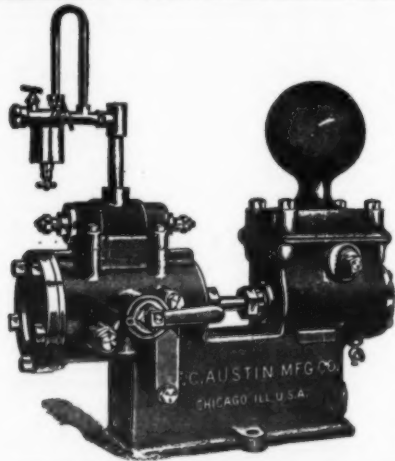
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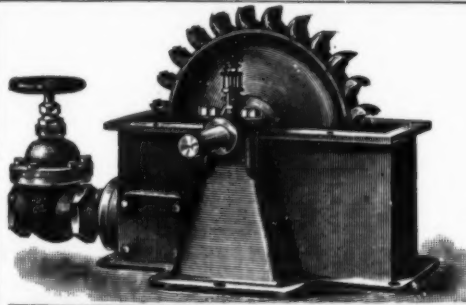
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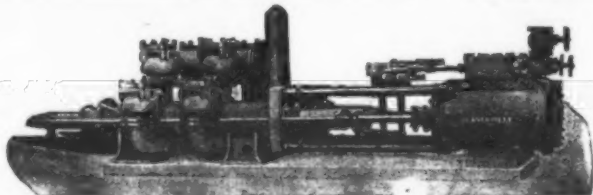
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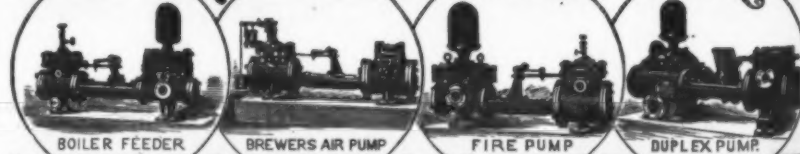
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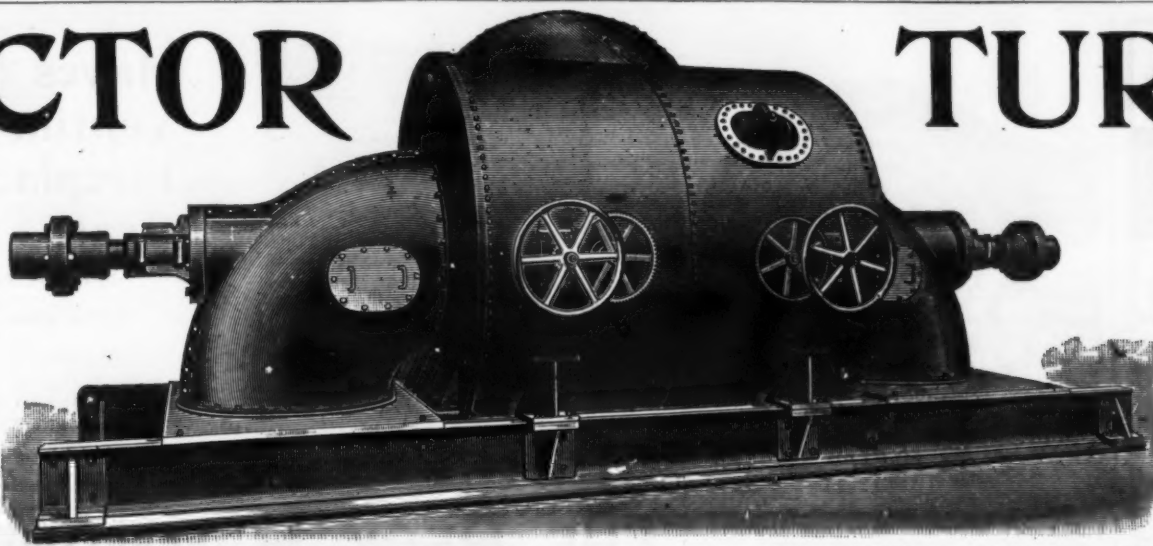
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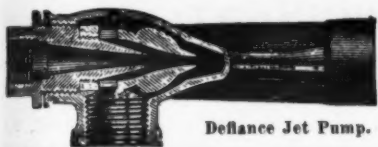
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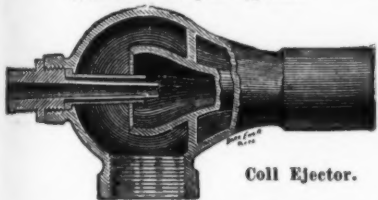
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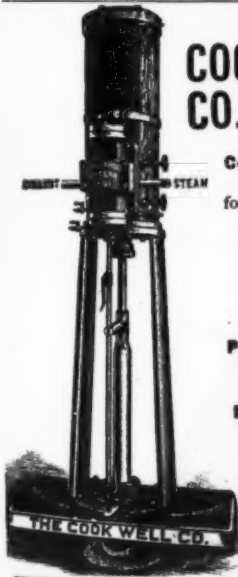
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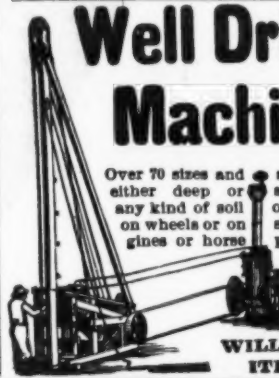
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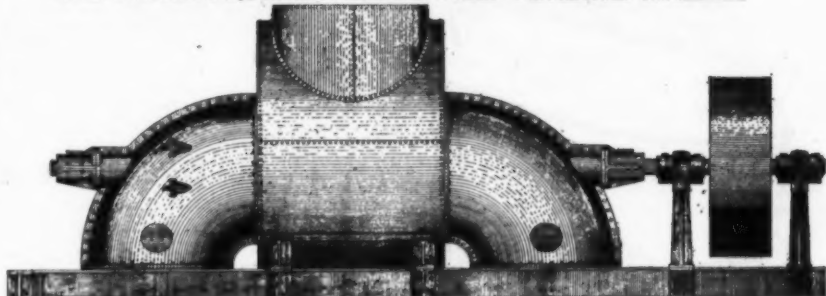
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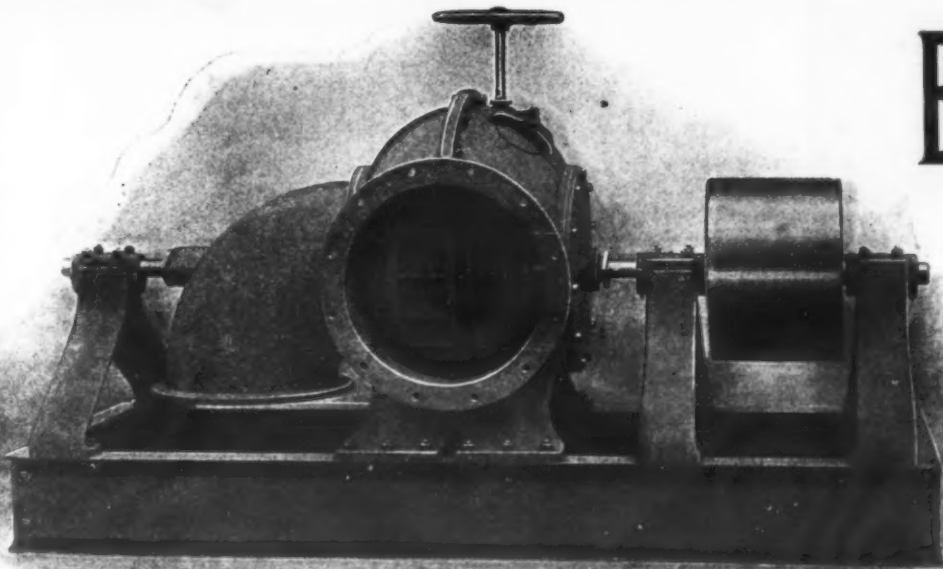
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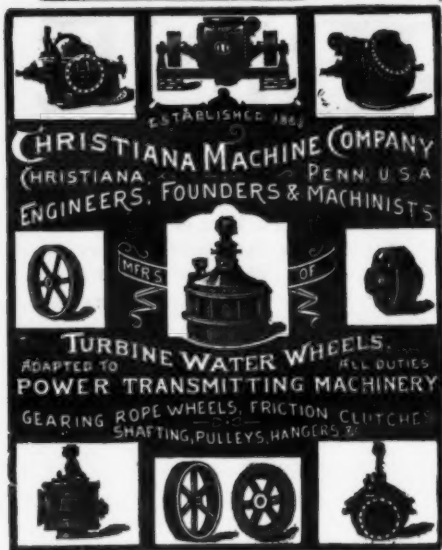
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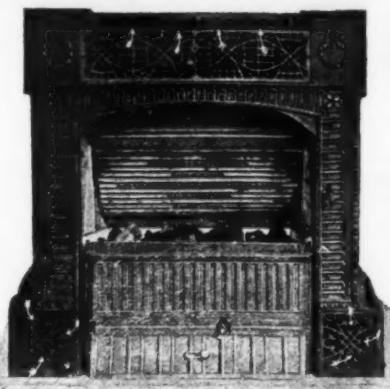
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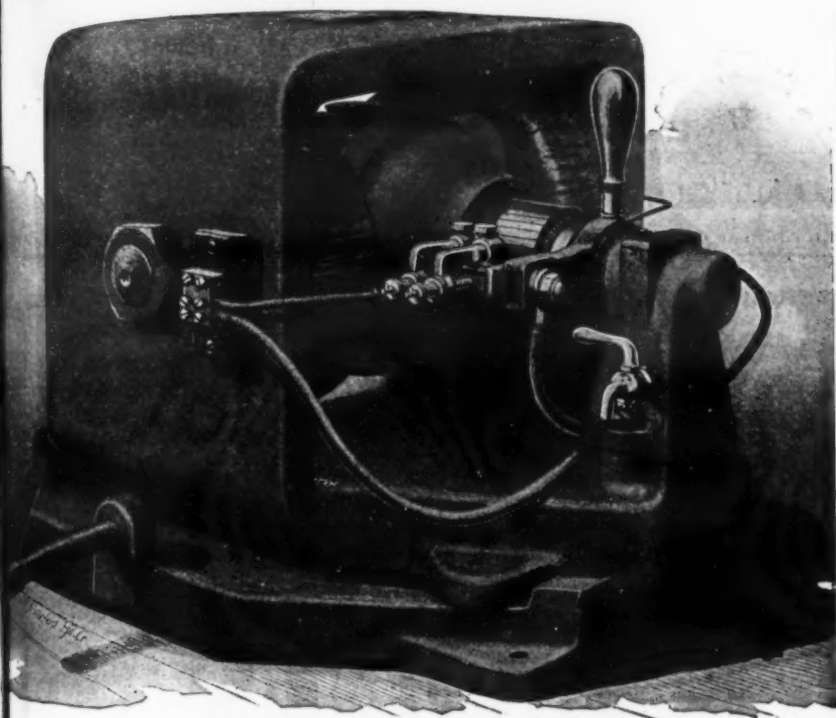
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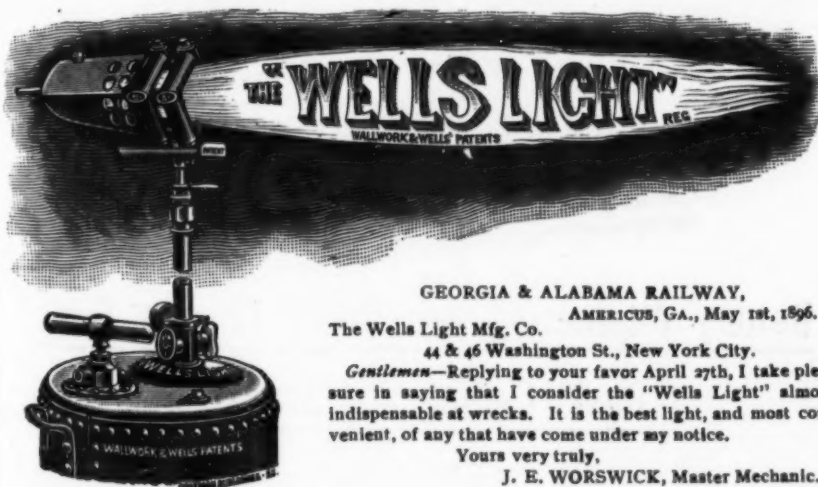
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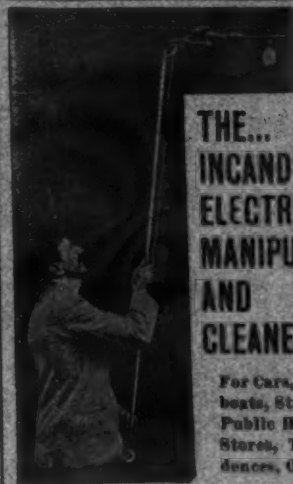
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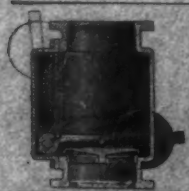
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